

SEQUENCE LISTING

Seq ID 1

atggttaatc	ctattggtcc	aggctcctata	gacgaaacag	aacgcacacc	tcccgcagat	60
ctttctgctc	aaggattgga	ggcgagtgc	gcaaataaga	gtgcggaagc	tcaaagaata	120
gcagggtcgg	aagctaagcc	taaagaatct	aagaccgatt	ctgtagagcg	atggagcatc	180
ttgcgttctg	cagtgaatgc	tctcatgagt	ctggcagata	agctgggtat	tgcttctagt	240
aacagctcgt	cttctactag	cagatctgca	gacgtggact	caacgcacagc	gaccgcacct	300
acgcctcctc	cacccacggt	tgatgattat	aagactcaag	cgcaaacagc	ttacgatact	360
atctttacct	caacatcact	agctgacata	caggctgctt	tggtgagcct	ccaggatgct	420
gtcactaata	taaaggatac	agcggctact	gatgaggaaa	ccgcaatcgc	tgccgagtg	480
gaaactaaga	atgccgatgc	agttaaagt	ggcgcgcaaa	ttacagaatt	agcgaaatat	540
gcttcgggata	accaagcgat	tcttgactct	ttaggtaaac	tgacttccct	cgacctctta	600
caggctgctc	ttctccaatc	tgtagcaaac	aataacaaag	cagctgagct	tcttaaagag	660
atgcaagata	acccagtagt	cccagggaaa	acgcctgcaa	ttgctcaatc	tttagttgat	720
cagacagatg	ctacagcgac	acagatagag	aaagatggaa	atgcgattag	ggatgcatat	780
tttgcaggac	agaacgctag	tgagctgta	gaaaatgcta	aatctaataa	cagtataagc	840
aacatagatt	cagctaaagc	agcaatcgct	actgctaaga	cacaaatagc	tgaagctcag	900
aaaaagttcc	ccgactctcc	aattcttcaa	gaagcggaaac	aaatggtaat	acaggctgag	960
aaagatctta	aaaatatcaa	acctgcagat	ggttctgatg	ttccaaatcc	aggaactaca	1020
ggtggaggct	ccaagcaaca	aggaagtagt	attggtagta	ttcgtgtttc	catgctgtta	1080
gatgatctg	aaaatgagac	cgcttccatt	ttgatgtctg	ggtttctgca	gatgattcac	1140
atgttcaata	cggaaaatcc	tgattctcaa	gctgccccaac	aggagctcgc	agcacaagct	1200
agagcagcga	aagccgctgg	agatgacagt	gctgctgcag	cgctggcaga	tgctcagaaa	1260
gctttagaag	cggtcttagg	taaaagctgg	caacaacagg	gcatactcaa	tgcttttagga	1320
cagatcgctt	ctgctgctgt	tgtgagcgca	ggagtctctc	ccgctgcagc	aagttctata	1380
gggtcatctg	taaaacagct	ttacaagacc	tcaaaatcta	caggttctga	ttataaaaca	1440
cagatatcag	caggttatga	tgcttacaaa	tccatcaatg	atgcctatgg	tagggcacga	1500
aatgatgcga	ctcgtgatgt	gataaacaat	gtaagtaccc	ccgctctcac	acgatccggt	1560
cctagagcac	gaacagaagc	tcgaggacca	gaaaaaacag	atcaagccct	cgtaggggtg	1620
atttctggca	atagcagaac	tcttgagat	gtctatagtc	aagtttcggc	actacaatct	1680
gtaatgcaga	tcattccagtc	gaatcctcaa	gcgaataatg	aggagatcag	acaaaagctt	1740
acatcggcag	tgacaaagcc	tccacagttt	ggctatcctt	atgtgcaact	ttctaatagac	1800
tctacacaga	agttcatagc	taaattagaa	agtttgtttg	ctgaaggatc	taggacagca	1860
gctgaaataa	aagcactttc	ctttgaaacg	aactccttgt	ttattcagca	ggtgctggtc	1920
aatatcggct	ctctatatctc	tggttatctc	caataa			1956

Seq ID 2

atgaaaaaac	tcttaaagtc	ggcgttatta	tccgcgcgat	ttgctggttc	tgctcggtcc	60
ttacaagcct	tgctgttagg	gaacccttct	gatccaagct	tattaattga	tggtacaata	120
tggaaggtg	ctgcaggaga	tccttgcgat	ccttgcgcta	cttggtgcga	cgctattagc	180
ttacgtgctg	gattttacgg	agactatggt	ttcgaccgta	tcttaaaagt	agatgcacct	240
aaaacatttt	ctatgggagc	caagcctact	ggatccgctg	ctgcaaaacta	tactactgcc	300
gtagatagac	ctaaccgggc	ctacaataag	catttacacg	atgcagagt	gttactaat	360
gcaggcttca	ttgccttaaa	catttggtg	cgcttgatg	tttctgtac	tttaggagct	420
tctaattggt	acattagagg	aaactctaca	gcgttcaatc	tcgttggttt	attcggagtt	480
aaaggtacta	ctgtaaatgc	aaatgaacta	ccaaacgttt	ctttaagtaa	cggagttggt	540
gaactttaca	cagacacctc	tttctcttgg	agcgtaggcg	ctcgtggagc	cttatgggaa	600
tgcggttggt	caactttggg	agctgaattc	caatatgcac	agtccaaacc	taaagttgaa	660
gaacttaatg	tgatctgtaa	cgtatcgcaa	ttctctgtaa	acaaacccaa	gggtataaaa	720
ggcggtgctt	tccccttgcc	atggcaagta	ggcgtagcaa	cagctactgg	aacaaagtct	780
gcgaccatca	attatcatga	acaatggctc	ggagcctctc	tatcttacag	actaaactct	840
ttagtgccat	acattggagt	tacagctggt	cgagcaactt	ttgatgctga	taacatccgc	900
attgctcagc	caaaactacc	gtctactact	ttaaacttaa	ctgcatggaa	cccttcttta	960
ctaggaaatg	ccacagcatt	gtctactact	gattcgttct	cagacttcat	gcaaattggt	1020
tctgtcaga	tcaacaagtt	taaactctaga	aaagcttggt	gagttactgt	aggagctact	1080
ttagttgatg	ctgataaatg	gtcacttact	gcagaagctc	gtttaattaa	cgagagagct	1140
gtcacggtat	ctgggtcagtt	cagattctaa				1170

Seq ID 3

atgtctgtta	atccatcagg	aaattccaag	aacgatctct	ggattacggg	agctcatgat	60
cagcatcccg	atgttaaaga	atccgggggt	acaagtgcga	acctaggaag	tcatagagt	120
actgcctcag	gaggacgcca	agggttatta	gcacgaatca	aagaagcagt	aaccgggttt	180

tttagtcgga	tgagcttctt	cagatcgga	gtcccaagag	gtagccaaca	accctctgct	240
ccatctgcag	atactgtacg	tagcccgttg	ccgggagggg	atgctcgcgc	taccgagga	300
gctggtagga	acttaattaa	aaaaggggtac	caaccagggg	tgaaagtcac	tatcccacag	360
gttcctggag	gagggggccca	acgttcatca	ggtagcacga	cactaaagcc	tacgcgtccg	420
gcacccccac	ctcctaaaac	gggtggaact	aatgcaaaac	gtccggcaac	gcacgggaag	480
gggtccagcac	cccagcctcc	taaaacaggt	gggaccaatg	ctaagcgcgc	agcaacgcac	540
gggaaagggtc	cagcacctca	acctcctaag	ggcattttga	aacagcctgg	gcagtcctgg	600
acttcaggaa	agaagcgtgt	cagctgggtct	gacgaagatt	aa		642

Seq ID 4

atgggaatca	atccttcggg	taatagatca	ccagatgatg	tatgggtag	aggagctcaa	60
ggcgatagct	ccagtaccca	aggtacagga	gctacaaact	caaactcttg	tgctcacaac	120
gtaactacat	caacctcaca	gccgcaagtt	gcttctaag	caaagcagtt	atggcagacg	180
gtaagggagt	tcttttttag	gaagaaatca	cccatttctt	ctcagggtgc	ttcgggacct	240
gcaatgcaaa	gtccttcagg	acctacaata	cggcctacgc	gtccggcacc	tccacctcct	300
acaacgggtg	gggctaattg	gaaacgtccc	gcaacgcag	ggaaagggtc	agcacctcaa	360
cctcctacgg	cggggtcttc	ttcaggatca	gagcaacctt	ctgccatgag	ttctgaagtc	420
gctaaacttg	tgagtgaatt	aaaagatgca	gtccatagtc	atgcggagtc	tcaaaaagta	480
cttaaaaagg	tatctcaaga	gctacaaaca	aagtggacgg	attgggaaaa	taataggggt	540
ccagactatc	ttttgcatgg	ttatcgtgtc	attgctcgag	ctttgcagca	aacatacaca	600
gaacaatcta	tgcttatcga	agggacttca	tctacaggac	cagttccgca	agcagtgaact	660
gtagctaagg	atgctgtaac	tcagacagtt	agaggcgcaa	ttaagaattt	agaaaatcct	720
aagccaggtg	atgatcctga	tggtgtactc	atgcaagtgg	ttataagctt	aggtatcgaa	780
ggacctacat	tagaccaggg	agaatctatc	caaaactttt	tagaaactag	ggtttcggat	840
ttcgggtggag	atgatagcga	catagattat	acaagtata	tagctcgatt	agggctcagct	900
ttagatcggg	tacgcgaaaa	tcactccta	gagatgccta	gaatatggat	agcattagca	960
cgagaactcg	gtgcgggtgt	acactctcat	gctacttccg	tccgaatcgc	aaatgcagga	1020
aagaatcaca	ctcgtgacgt	tgtgcgaatg	gccaatgagt	cgagtagact	acttcaaggt	1080
atgaaagtgt	tatcgggtcg	agcttgggcg	aatacaatga	cagttttaat	cggggatctt	1140
tttgaataa						1149

Seq ID 5

atgaaaacgt	tgtggcactt	cgtatccaaa	gcctttttat	cgatagtagg	actgtgttgc	60
ggagttgttc	ttgcttttgt	cgttatatcc	gcactcatag	cttctctctt	aggaaatggg	120
gatgctacct	tcgttagctt	gcctgacgcc	caaggagaag	taaaagatct	agggaaaaca	180
gccccatta	ttgctgttat	cgaaatgaaa	gatgtaattg	cttcttcaaa	aaatacggcc	240
aaaacgattc	agaatatttt	agaaggattt	gagaaagctc	ctcttaaaaga	tcgtgtcaaa	300
ggtattgtca	ttgatattga	ttgccagga	ggcgagggtc	ttgaaataga	tagaatttac	360
tctatgcttc	gcttttgga	agaacgtaa	ggattcccta	tttatattta	tgtgaatggt	420
ctttgtgctt	cgggaggcta	ttatgtatcc	tgcgtgcaa	ctaaaattta	tgccacctcc	480
tcctctctta	tcggttctat	cggagtgcgt	tctggacctt	tcttcaatgt	aaaagaaggt	540
ttaaactgct	acggagttag	aagtgatctg	ctgacagctg	gaaaagataa	ggctccaatg	600
aatccttata	caccgtggac	ttctcatgat	agagaagaac	ggcaagcgac	tcttgatttt	660
ctctacggac	aatgtgttag	tatagttaca	caaaaccgtc	ctctgcttac	taaagagaag	720
ttagttcaca	ctctcggagc	acgtattttt	tctccagaga	aggccaaaca	agaaggctat	780
attgatgttg	taggcgcaac	taaagaacaa	gtccttcaag	acatagttgc	tgtttgtaag	840
attgaagata	actatagagt	gattggctct	gggtgtgatg	gttggtggaa	gcgggtggct	900
tcagctgcag	cttcaagtcc	attagttact	ggcatgatta	aacacgatat	tctgccttta	960
tcccatgacg	ctgcatacat	acctccctac	ttggcactgt	ag		1002

Seq ID 6

atgagacctc	atcgtaaaaca	cgtatcatct	aaaagcttag	ctttaaagca	atctgcatca	60
actcatgtag	agatcacaac	aaaagccttt	cgtctctcta	tgctctctaa	acagctgac	120
ctagagaaaa	gcgaccacct	ccccctatg	gaaacaatcc	gtgtgggtgc	aacctctcat	180
aaagataagc	taggcaccga	gggtgcatgt	gtagcttctc	atggcaaaaga	aatccttcaa	240
actaagggtc	ataacgcaaa	cccatacact	gcagtgatca	atgcttttaa	gaaaatccgc	300
accatggcaa	ataagcactc	caataaacgt	aaagacagga	caaaacatga	tctaggtctt	360
gcagcaaaag	aagaacgtat	cgcaatacag	gaagaacaag	aagatcgcc	tagcaacgag	420
tggcttcctg	tcgaaggcct	cgtgcctgg	gattctctaa	aaactcttgg	gtatgttccc	480
gcatcagcga	aaaagaagat	ctccaagaaa	aagatgagca	ttcgtatgct	atctcaagac	540
gaggctatcc	gccagctaga	gtctgccgca	gaaaacttcc	tgatcttctt	gaacgagcaa	600
gagcataaaa	tccaatgcat	ttataaaaaa	catgacggca	actatgtcct	tattgaacct	660
tccctcaagc	caggattctg	catctga				687

Seq ID 7

atggcagctc	ctatcaacca	accatcgaca	acgactcaga	taactcaaac	tgggcagact	60
acaacgaca	caacggtagg	atcattagga	gagcattctg	ttacaacaac	aggatctggg	120
gcagcagcac	aaacatctca	gacagtaact	ctaattgcag	atcacgaaat	gcaagaaatt	180
gcaagtcaag	atggatccgc	ggtaagcttt	tctgctgagc	actctttttc	taccctccct	240
ccagagactg	gaagtgttgg	agctacagca	caatccgctc	aatctgcggg	gctattttca	300
ttatcaggtc	gtacacaaag	aagagattcg	gagatttctt	cctcttctga	cggcagttcg	360
atatctagaa	ctagctcaaa	cgcattctct	ggagaaacaa	gcagagctga	aagtagtctt	420
gatctaggcg	acttggatag	cttatcagga	agcgagcgcg	ctgaaggagc	cgaaggacct	480
gaaggacctg	gaggcttacc	tgaaagtacg	attccacatt	atgatcctac	cgataaaagc	540
tctattttga	acttcttgaa	aaatcctgca	gttcagcaga	aaatgcagac	caaaggaggc	600
cactttgttt	atgtagatga	agccagaagt	agtttcattt	ttgtccgcaa	tgggtgactgg	660
tcaactgctg	agtctataaa	agtttcta	gcaaaaacca	aagaaaatat	tactaagcct	720
gcggaacttag	aaatgtgcat	cgctaaattc	tgtgtgggat	atgaaacat	ccactcggat	780
tggacggggac	gcgtaaaacc	tacaatggaa	gagcgctcgg	gagccacagg	aaattacaat	840
catctgatgc	tcagcatgaa	atttaaaact	gctgtagtct	acggtccttg	gaatgctaaa	900
gaatctagta	gtggatatac	accctctgca	tggcgctcgt	gagcaaaagt	agaaacaggt	960
ccgatttggg	atgatgttgg	gggcttgaaa	ggcattaact	ggaaaacgac	cccagctcca	1020
gacttctcct	ttataaatga	aactccaggt	ggaggggctc	actcgacgct	tcatacaggt	1080
cctggcaactc	cagtaggagc	tactgtgggt	cctaattgta	atgtcaactt	gggaggcatt	1140
aaggttgatc	tgggtggcat	caatttaggt	ggaattacaa	cgaatgtcac	tacagaagaa	1200
ggtggtggaa	ccaacataac	atctacgaaa	tccacatcta	ctgatgataa	agtctcaata	1260
acatctacag	gatctcaaag	tacgatcgaa	gaagacacta	tacaatttga	cgatcctggt	1320
cagggagagg	atgataacgc	aattcccggc	acaaacacac	ctcctcctcc	aggtcctccg	1380
ccaaatctaa	gcagttctcg	cttgctgact	atttcgaatg	cgctcctgaa	ccaagtctta	1440
cagaatgtcc	gacaacatct	gaatacggct	tatgattoga	atggtaattc	agtctcagat	1500
ctcaatcagg	atttaggcca	ggtagtataa	aacagtga	aogagtgaa	cttccctact	1560
gtgattcttc	ctaaaactac	tggcgataca	gatccatccg	gtcaagcaac	cggaggagtc	1620
actgaaggcg	gcggtcatat	ccgtaatat	atccaaagga	atacacaatc	tacggggcaa	1680
agtgaaggag	caacacctac	acctcaacct	actatagcaa	agatagtga	ttccctgaga	1740
aaagcaaatg	taagttccag	ctctgtgcta	ccacaaccac	aagtagctac	gacgatcacc	1800
cctcaagcga	gaacggccag	tacatctaca	acgagcatag	gaaccgggac	agaaagcaca	1860
tctacaacaa	gtacgggaac	gggaacagga	agtgtctcca	cacaaagtac	tggcgtaggg	1920
acaccaacta	cgacgactcg	atctacagga	acttcggcga	caaccacaac	atcatcagct	1980
tcgacacaaa	caccccaagc	gcctcttccc	tctgggacca	ggcatgttgc	tacaatctcc	2040
ttagtgcgta	atgctgcagg	aaggtctatt	gtattacaac	aagggggtcg	atctcaaagc	2100
ttcccgatcc	ctccctcagg	gactggaaca	cagaatatgg	gggcacaatt	gtgggctgca	2160
gcaagtcaag	ttgcttcac	tttagggcag	gtcgtgaatc	aagcagctac	agcaggttct	2220
caaccctcct	ctcgtagatc	ttccccaaca	agtccacgaa	gaaaaatag		2268

Seq ID 8

atgaaaacgt	ctcaactctt	ttataagact	tcaaaaaatg	caaataaaag	cgctgctgtg	60
ctctcaaacg	agctcctaga	aaaggcagga	tacctattta	aagtaagtaa	aggagtctat	120
acctatacac	ccctgttatg	gcgcgtgggc	tccaagatga	tgaacatcat	tagagaggaa	180
cttaatgcga	ttggaggtca	agaacttcta	ctcccacttc	tccacaatgc	tgaactttgg	240
caacatacac	ggagatggga	ggcatttact	tcggaaggac	tgtctacac	tctcaaagac	300
cgcgaaggaa	aatctcattg	cctagctcct	acacatgaag	aggtcatctg	ctcttttgtt	360
gcacaatggc	tctcctcaaa	aagacaactt	cctctccacc	tttaccaaat	tgctacaaaa	420
ttccgagacg	agattcgccc	tcgattcggg	ctcattcgtc	ctcgagagct	ccttatggaa	480
gacagctata	ccttctcaga	ctctcccga	caaatgaacg	agcaatatga	aaaactccgc	540
tctgcgtata	gtaagatctt	tgatcgtctc	ggtcttgcc	atgtcatcgt	tacagctgat	600
ggagggaaaa	tcggcaaaag	aaagtctgag	gaatttcagg	tcctttgctc	tctaggcgag	660
gacacgatct	gcgtcagcgg	ttcctatgga	gctaataattg	aggtgctgt	ctccattcct	720
ccacagcatg	cctacgatcg	cgagtttctt	cccgtcgaag	aagtggccac	ccctgggatt	780
acaacaatag	aagctctagc	aaacttcttc	tctatccctt	tacataaaat	tttaaaaacc	840
cttgtcgtaa	aactctccta	ctcaaatgaa	gaaaaattca	ttgccattgg	aatgagagga	900
gatcggcaag	tcaacctagt	gaaggctcgt	tccaaactga	atgccgatga	tattgtctca	960
gcttctgatg	aagaaatcga	acgcgttcta	ggcacagaaa	aaggattcat	cgggtcccta	1020
aactgtccca	tagacttttt	cgcagacgaa	acaacgtccc	caatgacgaa	ctttgtttgt	1080
gcgggcaatg	ctaaagataa	gcactacgta	aatgtaaact	gggatcgcg	cctcctcccc	1140
ccccaatagc	gtgactttct	actcgtgaa	gaggagagaa	catgtcctga	aaatcctggc	1200
catccttacc	gcatttatca	aggcatagaa	gttgctcata	ttttcaatct	cgggacacgc	1260
tataccgata	gttttgaggt	aaacttccaa	gatgaacacg	ggcaaaccca	gcagtgtctg	1320
atggggacct	acggcattgg	agtcggaaga	acattagccg	cttgtgtaga	acagcttgcc	1380

gacgaccgtg	gtattgtttg	gccaaaagca	ctcgctccct	tctctatcac	tatcgccctt	1440
aaaggaggag	acactgtatc	tcaagagcct	gcggaaacta	tttatcatga	gctacaaagt	1500
caaggctatg	agccccctct	tgatgatcga	gatgaaagac	tcggatttaa	acttaaagac	1560
agtgaacctta	tcggcattcc	ttataagcct	atcttaggaa	agtcctacca	atcttcggga	1620
atattcgaaa	ttgaatcccg	atctggagaa	aagtatacag	tctccccgga	ggccttccct	1680
acttgggtgc	agaatcactt	agcctag				1707

Seq ID 9

atggcatcag	gaatcggagg	atctagtggg	ttaggaaaga	ttccacctaa	agataatggg	60
gatagaagtc	gatcgccctc	tcctaaggga	gaacttggca	gccacgagat	ttccctgcct	120
cctcaagaac	atggagagga	aggagcttca	ggatcttcgc	atatacatag	cagttcctct	180
tttctaccag	aagatcagga	gtctcagagc	tcttcttcgg	cagcttctag	cccgggattt	240
ttttctcgcg	tacgttcttg	ggtagacagg	gccttaaaat	catttggcaa	ctttttttcc	300
gcagagtcta	cgagtcaagc	gcgtgaaacg	cgacaagcct	ttgttagatt	atcaaaaacc	360
atcaccgcgg	atgagagacg	ggatgtcgat	tcatacaagt	ctgctgctac	agaagcccgga	420
gtggcagagg	acgcgagtgt	ttcaggcgaa	aatccttctc	aggggggttc	agaaacctct	480
tctggaccag	aacctcagcg	tttattttct	cttccttcag	taaaaaaaca	gagcggtttg	540
ggtcgggttg	tacagacagt	tcgcgatcgc	atagtacttc	ctagtggggc	tccacctaca	600
gacagcgagc	ctttaagtct	ctacgagcta	aacctcgtt	tgagtagttt	acgtcaggag	660
ctctctgaca	tacaaagtaa	tgatcagttg	actccagagg	aaaaagcaga	agccacagtt	720
accatacaac	agctgatcca	aattacagaa	ttccaatgcg	gctatatgga	ggcaacacaa	780
tcttcggtat	ctctagcaga	agctcgtttt	aagggggtag	aaactagtga	tgagatcaat	840
tcctctgtt	cagaactgac	agatcctgag	cttcaagaac	tcatgagtga	tgagactct	900
cttcaaaaacc	tattagatga	gactgccgac	gatttagaag	ctgctttgtc	ccatgctcga	960
ttgagttttt	ctttagacga	taatccaact	ccgatagaca	ataatccaac	tctgatttct	1020
caagaagagc	ctatttatga	ggaaatcgga	ggagctgcag	atcctcaaag	aactcgggaa	1080
aactgggtcta	caagattatg	gaatcagatt	cgcgaggctc	tggtttctct	tttaggaatg	1140
attttaagca	ttctagggtc	catcttgcac	aggttgcgta	ttgctcgtca	tgacgtgct	1200
gaagcagtg	gtcgttgttg	cacgtgccga	ggagaagagt	gtactttctc	tgaagaggac	1260
tcgatgtcgg	tgggggtctc	ttcagaaatt	gatgaaactg	aaagaacggg	ctctccgcat	1320
gacgttccac	gcagaaatgg	aagtccacgt	gaagattctc	cattgatgaa	tgcttagta	1380
ggatggggcac	ataagcacgg	tgctaaaacc	aaggagagtt	cagaatcaag	taccccgga	1440
atttcgattt	ctgctcccat	agtgaaggt	tggagtcagg	acagttccgt	cagttttatt	1500
gttatggaag	atgatcatat	tttctatgat	gttcctcgta	gaaaagatgg	aatctatgac	1560
gttcctagtt	cccctagatg	gagtcctcgc	cgagagttgg	aagaggatgt	ttttggagat	1620
tatgaagttc	ctataacctc	tgctgaacca	tctaaagaca	agaacatcta	catgacacct	1680
agattagcaa	ctcctgctat	ctatgatctt	ccttcacgtc	caggatcgtc	tggagctca	1740
cgttctccgt	cttcagatcg	cgtacgaage	agctcaccaa	atagacgggg	tgtgcctctt	1800
cctccagttc	cttcacctgc	tatgagttag	gaggggagca	tttatgagga	tatgagcgg	1860
gcttcagggtg	caggtgaaag	tgattatgaa	gatattgagc	gttccccctc	tcctagaggc	1920
gacttggatg	aacccatata	tgctaatact	cctgaagata	atccatttac	tcagagaaat	1980
atagatagaa	ttttacagga	gaggtcaggc	ggtgcttcog	cttctcctgt	agagcctatt	2040
tatgatgaga	tcccatggat	tcattggcagg	ccccctgcta	cacttccaag	acccgagaat	2100
acattgacta	atgtttcgtc	tagagtgagc	ccagggtttg	gaccagaagt	aagagccgct	2160
ttgcttagcg	agagcgtgag	tgctgttatg	gtcgaagcag	agagtattgt	tcctccaaca	2220
gagccggggg	acgggagaatc	agaatatcta	gagcccttag	ggggacttgt	agctacaacg	2280
aaaatcttac	tacaaaaagg	atggcctcgt	ggagagtcga	atgcttag		2328

Seq ID 10

atgcgctttt	tttgcttcgg	aatgttgctt	ccttttactt	ttgtattggc	taatgaaggt	60
ctccaacttc	ctttggagac	ctatatatac	ttaatgctct	aatatcaagc	agccctcaa	120
gtagggttta	ctcataacca	aaatcaagat	ctcgcaattg	tcgggaatca	caatgatttc	180
atcttggact	ataagtacta	tcggtcgaat	ggaggtgctc	ttacctgtaa	gaatctcttg	240
atctctgaaa	atatagggaa	tgtcttcttt	gagaagaatg	tctgtcccaa	ttctggcggg	300
gcaatttatg	ctgctcaaaa	ttgcacgata	tccaagaatc	agaactatgc	atttactaca	360
aacttggctc	ctgacaatcc	tacagccact	gcgggatcac	tattgggtgg	agctctcttt	420
gccataaatt	gctctattac	taataacctc	ggacagggaa	ctttcgttga	caatctcgct	480
ttaaataagg	gggggtgcct	ctatactgag	acgaacttat	ctattaaaga	caataaaggc	540
ccgatcataa	tcaagcagaa	tcgggcacta	aattcggaca	gtttaggagg	agggatttat	600
agtgggaact	ctctaaatat	agagggaaat	tctggagcta	tacagatcac	aagcaactct	660
tcaggatctg	ggggaggcat	atcttctacc	caaactctca	cgatctcctc	gaataaaaaa	720
ctcatagaaa	tcagtgaana	ttccgcgttc	gcaataaact	atggatcgaa	cttcaatcca	780
ggaggaggag	gtcttactac	caccttttgc	acgatattga	acaaccgaga	aggggtactc	840
tttaacaata	accaaagcca	gagcaacggg	ggagccattc	atgcgaaatc	tatcattatc	900

aaagaaaatg	gtcctgtata	cttttttaaat	aacactgcaa	ctcggggagg	ggctctcctc	960
aacttatcag	caggttctgg	aaacggaagc	ttcatcttat	ctgcagataa	tggagatatt	1020
atctttaaca	ataatacggc	ctccaagcat	gccctcaatc	ctccatacag	aaacgccatt	1080
cactcgactc	ctaataatgaa	tctgcaaata	ggagcccgtc	ccggctatcg	agtgtgttcc	1140
tatgatccca	tagaacatga	gctcccttcc	tccttcccca	tactctttaa	tttcgaaacc	1200
ggtcatacag	gtacagtttt	attttcaggg	gaacatgtac	accagaactt	taccgatgaa	1260
atgaatttct	tttcctattt	aaggaacact	tcggaactac	gtcaaggagt	ccttgctgtt	1320
gaagatgggtg	cggggctggc	ctgctataag	ttcttccaac	gaggaggcac	tctacttcta	1380
ggtcaagggtg	cggtgatcac	gacagcagga	acgattccca	caccatcctc	aacaccaacg	1440
acagtaggaa	gtactataac	tttaaatac	attgccattg	accttccttc	tattctttct	1500
tttcaagctc	aggctccaaa	aatttggatt	taccccacaa	aaacaggatc	tacctatact	1560
gaagattcca	acccgacaat	cacaatctca	ggaactctca	ccttacgcaa	cagcaacaac	1620
gaagatccct	acgatagtct	ggatctctcg	cactctcttg	agaaagtccc	ccttctttat	1680
attgtcgatg	togctgcaca	aaaaattaac	tcttcgcaac	tggatctatc	cacattaaat	1740
tctggcgaaac	actatgggta	tcaaggcatc	tggctgacct	attgggtaga	aactacaaca	1800
atcacgaacc	ctacatctct	actaggcgcg	aatacaaaac	acaagctgct	ctatgcaaac	1860
tggctctcctc	taggctacog	tcctcatccc	gaacgtcgag	gagaattcat	tacgaatgcc	1920
ttgtggcaat	cggcatatac	ggctcttgca	ggactccact	ccctctcctc	ctgggatgaa	1980
gagaagggtc	atgcagcttc	cttacaaggc	attggtcttc	tggttcatca	aaaagacaaa	2040
aacggtttta	agggatttcg	tagtcatatg	acaggttata	gtgctaccac	cgaagcaacc	2100
tcttctcaaa	gtccgaattt	ctcttttagga	tttgctcagt	tcttctccaa	agctaaagaa	2160
catgaatctc	aaaatagcac	gtcctctcac	cactatttct	ctggaatgtg	catagaaaaa	2220
actctcttca	aagagtggat	acgtctatct	gtgtctcttg	cttatatgtt	tacctcgga	2280
cataccata	caatgtatca	gggtctcctg	gaagggaact	ctcagggatc	tttccacaac	2340
cataccttag	caggggctct	ctcctgtgtt	ttcttacctc	aacctcacgg	cgagtcctctg	2400
cagatctatc	cctttattac	tgccttagcc	atccgaggaa	atcttgctgc	gtttcaagaa	2460
tctggagacc	atgctcgagg	attttcccta	caccgcccc	taacggacgt	ctccctccct	2520
gtaggaatcc	gcgcttcttg	gaagaaccac	caccgagttc	ccctagtctg	gtcacagaa	2580
attttctatc	gctctactct	ctataggcaa	gatcctgaac	tccactcgaa	attactgatt	2640
agccaaggta	cgtggacgac	gcaggccact	cctgtgacct	acaatgcttt	agggatcaaa	2700
gtgaaaaata	ccatgcaggt	gtttcctaaa	gtcactctct	ccttagatta	ctctgcggat	2760
atttcttctc	ccacgtgag	tcactactta	aacgtggcga	gtagaatgag	attttaa	2817

Seq ID 11

atgaaatcct	ctcttcattg	gtttttaatc	togtcatott	tagcacttcc	cttgtcacta	60
aatttctctg	cgtttgctgc	tgttgttgaa	atcaatctag	gacctaccaa	tagcttctct	120
ggaccaggaa	cctacactcc	tccagcccaa	acaacaaatg	cagatggaac	tatctataat	180
ctaacagggg	atgtctcaat	caccaatgca	ggatctccga	cagctctaac	cgcttctctg	240
tttaaagaaa	ctactgggaa	tctttcttct	caaggccacg	gctaccaatt	tctcctacaa	300
aatatcgatg	cgggagcgaa	ctgtaccttt	accaatacac	ctgcaaataa	gcttctctcc	360
ttttcaggat	tctcctattt	gtcactaata	caaaccaoga	atgctaccac	aggaacagga	420
gccatcaagt	ccacaggagc	ttgttctatt	cagtogaact	atagttgcta	ctttggccaa	480
aacttttcta	atgacaatgg	aggcgccctc	caaggcagct	ctatcagtct	atcgctaaac	540
cccaacctaa	cgtttgccaa	aaacaaagca	acgcaaaaag	ggggtgccct	ctattccacg	600
ggagggatta	caattaacaa	tacgttaaac	tcagcatcat	tttctgaaaa	taccgcgcg	660
aacaatggcg	gagccattta	cacggaagct	agcagtttta	ttagcagcaa	caaagcaatt	720
agctttataa	acaatagtgt	gaccgcaacc	tcagctacag	ggggagccat	ttactgtagt	780
agtacatcag	cccccaaacc	agtcttaact	ctatcagaca	acgggggaact	gaactttata	840
ggaaatacag	caattactag	tgggtggggcg	atttatactg	acaatctagt	tctttcttct	900
ggaggaccta	cgctttttaa	aaacaactct	gctatagata	ctgcagctcc	cttaggagga	960
gcaattgcga	ttgctgactc	tggatctttg	agtctttcgg	ctcttggtgg	agacatcact	1020
tttgaaggaa	acacagtagt	caaaggagct	tcttcgagtc	agaccactac	cagaaattct	1080
attaacatcg	gaaacaccaa	tgctaagatt	gtacagctgc	gagcctctca	aggcaatact	1140
atctacttct	atgatcctat	aacaactagc	atcactgcag	ctctctcaga	tgctctaaac	1200
ttaaattggtc	ctgaccttgc	agggaatcct	gcatatcaag	gaaccatcgt	attttctgga	1260
gagaagctct	cgggaagcaga	agctgcagaa	gctgataatc	tcaaactctac	aattcagcaa	1320
cctctaactc	ttgcgggagg	gcaactctct	cttaaatcag	gagtcactct	agttgccaag	1380
tccttttctg	aatctccggg	ctctaaccct	ctcatggatg	cagggaccac	attagaaacc	1440
gctgatggga	tcactatcaa	taatcttggt	ctcaatgtag	attccttaaa	agagaccaag	1500
aaggctacgc	taaaagcaac	acaagcaagt	cagacagtc	ctttatctgg	atogctctct	1560
cttgtagatc	cttctggaaa	tgtctacgaa	gatgtctctt	ggaataaacc	tcaagtcttt	1620
tcttgtctca	ctcttactgc	tgaogacccc	gcgaatatcc	acatcacaga	cttagctgct	1680
gatcccctag	aaaaaaatcc	tatccattgg	ggataccaag	ggaattgggc	attatcttgg	1740
caagaggata	ctgcgactaa	atccaaagca	gcgactctta	cctggacaaa	aacaggatac	1800

aatccgaatc	ctgagcgtcg	tggaaacctta	gttgctaaca	cactatgggg	atcctttgtt	1860
gatgtgcgt	ccatacaaca	gcttgtagcc	actaaagtac	gccaatctca	agaaaactcgc	1920
ggcatctggg	gtgaagggat	ctcgaaacttc	ttccataaag	atagcacgaa	gataaaataaa	1980
ggttttcgcc	acataagtcg	agggttatgtt	gtaggagcga	ctacaacatt	agcttctgat	2040
aatctttatca	ctgcagcctt	ctgccaatta	ttcgggaaag	atagagatca	ctttataaat	2100
aaaaatagag	cttctgccta	tgcagcttct	ctccatctcc	agcatctagc	gaccttgtct	2160
tctccaagct	tgttacgcta	ccttcctgga	tctgaaagt	agcagcctgt	cctctttgat	2220
gctcagatca	gctatatcta	tagtaaaaa	actatgaaaa	cctattacac	ccaagcacca	2280
aagggagaga	gctcgtggta	taatgacggg	tgcgctctgg	aacttgcgag	ctccctacca	2340
cacactgctt	taagccatga	gggtctcttc	cacgcgtatt	ttcctttcat	caaagtagaa	2400
gcttcgtaca	tacaccaaga	tagcttcaaa	gaacgtaata	ctaccttggg	acgatctttc	2460
gatagcgggtg	atttaattaa	cgtctctgtg	cctattggaa	ttaccttcga	gagattctcg	2520
agaaacgagc	gtgcgtctta	cgaagctact	gtcatctacg	ttgccgatgt	ctatcgtaag	2580
aatcctgact	gcacgacagc	tctcctaato	aacaatacct	cgtggaaaaac	tacaggaacg	2640
aatctctcaa	gacaagctgg	tatcggaaga	gcagggatct	tttatgcctt	ctctccaaat	2700
cttgagggtca	caagtaacct	atctatggaa	attcgtggat	cttcacgcag	ctacaatgca	2760
gatcttggag	gtaagttcca	gttctaa				2787

Seq ID 12

atgtttgaga	agttcactaa	tagagcaaaa	caagtcatta	aactggcgaa	aaaggaggct	60
cagcgttttaa	atcataacta	cctgggtact	gagcacatcc	tgcttgggtct	tctcaaaactt	120
ggtcaagggg	tagctgttaa	tgtattacgc	aacctcggtta	tagattttga	tacggcacgg	180
caagagggtg	aacgcctgat	tggttatggg	ccagaaattc	aagtctacgg	agacctgccc	240
cttacaggaa	gagtaaaaaa	atcttttgaa	tcagcaaatg	aagaggccag	ccttttagag	300
cacaattatg	tggggacgga	gcatttactc	ttagggatcc	tacatcaatc	agatagtgtc	360
gctcttcagg	tattagaaaa	cttacatate	gatccaagag	aggttcgtaa	ggaaattcctt	420
aaagaattag	agaccttcaa	tctacaactt	cctcctctgt	cgtcgtcttc	ttcctcatcc	480
tctcgaagca	accttctatc	ttcaaaatct	cctttaggtc	atagcttagg	ttctgacaaa	540
aacgaaaagc	tttctgctct	gaaagcatat	ggttatgatt	taacggagat	ggtcgagag	600
tctaagctcg	atcctgtcat	tggtcgttct	tcagaagtog	aacggttgat	tttgattctt	660
tgccgaagaa	gaaaaaacaa	tcctgtactt	attggagaag	ctggagttgg	taagactgca	720
attgtttgag	gtctggctca	aaaaatcatt	ctgaatgagg	ttcctgatgc	cttacggaaa	780
aagcgactga	ttactctaga	tctagcatta	atgattgctg	gaacaaaaata	tcgagggcaa	840
tttgaggaac	ggatcaaagc	tgtcatggat	gaagttcgca	agcatggaaa	catcttgctc	900
ttcattgacg	agctccacac	gattgtagga	gcaggagcag	ctgaagggtgc	tatcgatgct	960
tcaaacattt	taaaacctgc	gttagcgcga	ggtgaaattc	agtgtattgg	agcaactacg	1020
atagatgagt	atcgcaagca	catagaaaaa	gacgcagctt	tagaacgtcg	tttccaaaaa	1080
atcgtgggtc	acctcctag	tgtagatgag	actattgaga	ttttacgtgg	cctcaagaaa	1140
aagtatgaag	aacatcacaa	tgtcttcatt	actgaagaag	ccttaaaagc	agctgcgact	1200
ctttctgac	aatatgttca	tggacgtttc	ctccctgata	aagcaataga	tcttttagat	1260
gaagctgggg	ctcgtgtccg	tgtgaataca	atgggtcagc	ctacagattt	aatgaagcta	1320
gaggctgaaa	tcgaaaatac	aaaattggcc	aaagagcagg	ccattggaac	tcaagaatac	1380
gaaaaagctg	cagggtttacg	tgatgaagag	aaaaaacttc	gcgaacgtct	gcaaagtatg	1440
aaacaggaat	gggaaaatca	taaagaagag	caccaagttc	ctgtagatga	agaagcagtc	1500
gctcaggtag	tttctctaca	aacaggaatt	ccctcagcaa	ggctcacaga	agctgaaagt	1560
gagaagcttc	tgaagttaga	agacacgtta	agaagaaaag	tcattggtca	aaatgatgcc	1620
gttaccagca	tttgccgtgc	catccgacgt	tctcgaacag	ggatcaaaga	tcctaaccga	1680
cctacgggct	ccttctctatt	cottggggcct	accgggtgtag	ggaaaagcct	gctcgcccaa	1740
caaattgcta	tagagatggt	cgggtggtgaa	gacgctctga	ttcaggtaga	catgtcagag	1800
tacatggaga	aatttctctgc	taccaagatg	atgggatcac	ctccaggata	tgtaggatcat	1860
gaagaagggg	gccaccttac	ggaacaggta	cgtcgccgtc	cttactgcgt	tgttctctttt	1920
gatgagatag	aaaaggcaca	cccagacatt	atggacctga	tgttgcaaat	tttagagcaa	1980
ggacgtctta	ctgattctttt	tggtcgcaaa	gtggatttcc	gtcatgccat	tattatcatg	2040
acctccaatt	tgggagctga	tctcattcgt	aaaagcggag	aaattgggtt	tggcttgaag	2100
tcccatatgg	actataaggt	catccaagag	aaaatcgaa	atgctatgaa	gaaacactta	2160
aagcctgagt	tcattaacccg	tttggatgaa	agtgtgattt	tccgtccctt	cgagaaagaa	2220
tctctatcgg	agatcatcca	tttagagatc	aacaaactgg	actcgagact	gaaaaactac	2280
caaatggctt	tgaacatccc	agactctgtg	atttccttcc	tagtaacgaa	ggggcattct	2340
ccagaaatgg	gagcacgtcc	tctacgccgt	gtcattgagc	agtaccttga	agatcctcta	2400
gcggagctct	tgtctaaaga	gtcctgcctg	caagaagctc	gcaagctacg	agcaaccttg	2460
gttgaaaatc	gcgttgctt	tgaaggggaa	gaagaggagc	aggaagctgc	tctccctagc	2520
cctcacttgg	aatcatag					2538

Seq ID 13

atggggctgc	aatccaggtt	acaacattgt	atagaagtgt	cccagaattc	gaactttgat	60
tcacaagtaa	aacagtttat	ctatgcgtgc	caagataaga	cattaaggca	gtctgtactc	120
aagattttcc	gctaccatcc	tttactaaaa	attcatgata	ttgctcgggc	cgtctatctt	180
ttgatggcct	tagaagaagg	cgaggattta	ggcttaagct	ttttaaatgt	acagcagtac	240
ccttcagggtg	ctgtagaact	gttttcttgt	gggggatttc	cttggaagg	attaccttat	300
cctgcagaac	atgcggaatt	tggcctactc	ctgttacaga	tcgcagagtt	ttatgaagag	360
agtcaggcat	acgtctctaa	aatgagtcac	tttcaacagg	cactctttga	tcaccaaggg	420
agegtctttc	cctctctctg	gagccaggag	aactctcgac	tcctaaaaga	aaagacaact	480
cttagccaat	cgtttctctt	ccaattagga	atgcaaattc	acccagaata	cagtottgag	540
gatcctgcac	tagggttctg	gatgcaaaga	acgcgttctt	catccgcttt	tgtagccgct	600
tcaggatgtc	aaagtagctt	gggagcgtat	tcctcagggg	atgtcgggtg	tatcgcttat	660
ggaccttgct	ctggagacat	tagtgattgt	tattattttg	gatgttgtgg	aatcgctaaa	720
gagttcgtgt	gccaaaaatc	tcaccaaaact	acagagattt	cttttctcac	ctctacagga	780
aagcctcatc	ccagaaatac	gggattttcc	taccttcgag	attcctatgt	acatctgccg	840
atccgctgta	agatcactat	ttccgacaag	caatatcgcg	tgacgctgc	gttggctgag	900
gccacctctg	ccatgacgtt	ttctattttc	tgtaagggga	agaattgtca	ggttgttgac	960
ggcctcgctg	tgcgctcctg	ttccctagat	tcttataaag	gtcccggaag	cgacattatg	1020
attcttgggg	aaaatgacgc	aatcaacatt	gtttctgcaa	gtccctatat	ggaaattttt	1080
gctttgcaag	gcaaagaaaa	attttggaat	gcagactttt	tgattaatat	tccttacaaa	1140
gaagagggcg	tcatgttaat	ttttgaaaaa	aaagtgcct	ctgagaaagg	aagattcttt	1200
acgaagatga	attaa					1215

Seq ID 14

atgacaaaaga	tagcttttttc	tgaaaaggca	aagaattttc	ctgtagagggc	attaaaaaaa	60
tggtttgaaa	aaaataaacg	atctcttcct	tggagagata	acccgactcc	ctatagtgtg	120
tgggtttccg	aagttatgct	acagcaaacg	cgagctgaag	ttgttataga	ttattttaat	180
cagtggatgg	agagattttc	taccatagag	tctttagctg	cagcaaaaaga	agaagatgtc	240
attaagttat	gggagggatt	gggttattat	tctcgagcgc	gccatctttt	agagggagct	300
cgcattggtta	tggaggagtt	tcatggaaag	atccctgatg	atgccatttc	cttagctcaa	360
attcgtggag	ttggtcctta	tacggttcat	gctattctag	cctttgcttt	taagaggcgt	420
gctgctgctg	tggatggcaa	tgtcctgcgt	gttcttagcc	ggatattttt	gatagaaact	480
tctatagact	tagaatcaac	tcgtacttgg	gtttctagga	ttgctcaagc	gcttcttctt	540
cataagagtc	ccgaggttat	agctgaggct	ctgatagagt	tgggagcttg	tatctgtaaa	600
aaagtctctc	aatgtcatcg	ttgtcctgtc	cgtaagcat	gtggagcttg	gagggagaaac	660
aaacagttcg	tattgcccgt	acgtcatgcc	agaaaaaagg	tcattctttt	gcacgctttg	720
gtagcgattg	tattgtacga	tggctctttg	gttgtcgaga	agagacgtcc	taaagaaatg	780
atggcaggct	tatatgaatt	tccttatatt	gaagttgaac	cagaggaagg	tcttcaagat	840
atagaaggat	ttactaagaa	gatggagctt	tctttagaaa	gcccttttga	attcttaggt	900
aaccttaaaag	aacagcggca	tgcgtttact	aatcataagg	ttcattttgtg	tcctataatt	960
tttaaagcca	cttctctgcc	tcagttcggg	gaattgcac	ttttgagtga	tatagatcac	1020
ttagctttttt	cttcaggaca	caaaaagatt	aaagatgctt	tgctaactca	cctcggggat	1080
gtcagggtcta	gagaatcaat	aggagtatatg				1110

Seq ID 15

atggcagttt	cagggtggcgg	aggggttcag	ccttcttcgg	atccaggaaa	gtggaatcct	60
gctctgcaag	gagagcaggc	agaaggcccg	tctccgctaa	aagaatctat	atcttctgaa	120
accaagcagg	cctcctctgc	tgcgaagcag	gaaagcttag	tgcgttcagg	atctacagga	180
atgtatgcaa	cagaatctca	gataaataag	gctaagtatc	gtaaaagctca	agatcgatca	240
tcaacctctc	caaaaatccaa	attgaaaggt	acatttttcta	aaatgcgcgc	tagtggtgcaa	300
ggattcatgt	caggattcgg	atctcgggct	tcgagagtgt	cagcaaaagcg	tgcttccgat	360
agtgggtgagg	gaacatcctt	attgccgaca	gagatggatg	ttgctctaaa	gaagggaaac	420
cgtattttcac	ctgaaatgca	gggatttttc	ttagatgctt	cgggtatggg	agggagtctc	480
tctgatattt	ctcagctttc	tttagaggct	ttgaaatctt	cagcattttc	aggtgccagg	540
agttaaagtt	taagctcttc	agaatctagt	tccgtggctt	cgtttggatc	tttccaaaag	600
gccatagagc	ctatgagtga	ggagaaggta	aatgcttggg	cagtggctcg	tttaggaggg	660
gagatgggtca	gctctcttct	cgatcccaat	gttgagacct	catcattagt	gcgcagggca	720
atggcaacag	gcaacgaagg	catgatagat	ctttctgatt	taggacagga	agaggctcagt	780
acagccatga	catctcccag	agcagtagaa	ggaaaagttaa	aggatatctc	ttctgattct	840
ccagaagcga	atccaacagg	aattccaaat	tctaatactt	tagaaaagggc	ggaaaaggaa	900
gcagagaaac	aagaaagtgc	agagcagttg	agtgaggatc	agatgatgct	tgacgctgct	960
atggctgggg	ttcttacagg	ggcagcgctt	caagagggtat	tgagtaattc	tgtttggtct	1020
ggtccttcta	cagtattttc	tcctcccaag	ttttcaggaa	ctttaccac	ccagagatcg	1080
ggagataaat	caaagcataa	atctccagga	atagagaaga	gtacgaacca	tacgaacttt	1140
tctcctcttc	gggaaggtac	tgtgaagagt	gctgagggtta	aaagtttgcc	tcacccagaa	1200

agtatgtatc	gttttcctaa	agatagcatc	gtttccaggg	aggaacctga	agccgtttgtt	1260
aaagaatcta	cggcattcaa	aatccagag	aatagcagtc	aaaactttct	ccctattgct	1320
gtggagagtg	ttttccctaa	ggaaagtgg	acgggagggg	cttttaggaag	tgatgctgtg	1380
agttcctcat	atcatttcc	tgcgcaacgt	ggagtgtctt	tactcgctcc	tctacctcgt	1440
gctactgatg	actataaaga	gaagctcgaa	gctcataaag	gtcctggagg	tcctccagat	1500
cctttgattt	atcagtatcg	aaatgttgct	gttgagccgc	caattgttct	ccgttctccc	1560
cagccgtttt	caggatcttc	acgtctatcg	gttcaaggaa	agcctgaagc	tgcttcagtt	1620
catgacgatg	gtgggggggg	aaatagtgg	ggtttttagcg	gagatcaaag	aagaggatct	1680
tcggggccaga	aagcttcccc	tcaggaaaag	aagggaaaaa	aattatctac	ggatatttag	1740

Seq ID 16

atgaaacgaa	gatcatggct	taaaattttg	ggaatctggt	taggcagcag	cattgtcttg	60
ggattcctta	tattcttgcc	ccaactactt	tcaacagaat	cagggaataa	ccttggtgtt	120
tccttgattc	ataaagaatc	cggactctcg	tggtctgctg	aagaacttaa	gatttcatgg	180
tttgacggc	aaacagctag	aaaaataaaa	ctcactggag	aagctaaaga	tgaggtcttt	240
tctgctgaga	aattcgaact	cgacggatct	ctattacgtc	ttctgattta	taaaaagcct	300
aaagggatta	ctctatcagg	atgggtcttta	aaaattaatg	agcctgcctc	tatagaccat	360
cctttctgta	gtcacttaga	tcaggatct	ttacttacct	acctaaatga	ctgcaagatt	420
atttctgagc	acggatttat	cactatgaag	acagtatcag	gatcttcatt	atctgtatca	480
gggttttatc	tagagaaatc	ctcagaaaag	ttcatgacga	aatgcgtggg	ctctgaagat	540
cagcaatccg	ggaacatctt	tatagagagt	gtactttctc	ctgatgtcag	tatttccgct	600
cagttttctt	cagttccccg	tgcatTTTTT	aaaattttta	tagcttcccc	ttctgggac	660
catcttctct	cttatgaaga	cataatcaat	ctatcagcag	aggcaacaca	taccaattgat	720
ggtaagattt	ctatgacagc	ctctggcgag	ggaaatcaaa	ttcaaatgaa	gcttcaaggc	780
catattcata	aatccacatt	ttatattgta	gaaggaggtt	cttcggtcat	agaacttaaa	840
cctgagctcg	cctcagctct	ttgcaaccag	atcattccgc	tgccacaccc	cattactagt	900
aagcaaatcc	atgctacggg	ctcttatgct	aaaattccct	tggatattac	gaaatggaaa	960
catattgaaa	ttacctctca	agcacagctc	cctgaagtcg	caatacatcc	gaaagaccct	1020
aatcttgcat	tacagctgcg	cgacacaaa	ctaggaatta	aaaagacgga	gaaattctca	1080
gacatccgtt	actcctcctc	tacagtctta	ggaggagctt	ctccctctca	ccttaatggt	1140
ttaatcagta	tagataacaa	aaaacatctt	actaaatttc	gtctacaaca	agcacaactc	1200
ccccacacct	atctaagagc	cattttccct	caacctttcg	tgatcaatgt	tcctctggat	1260
gttgcttatt	attcattaaa	tatcgaaggg	acgtacaaaa	atgctcactt	agaggcagat	1320
gctatcctag	ataaccgcgt	attgaaattg	tcattgctcca	tgtctggagc	atggaaaaat	1380
tttcttttta	aagggcaagg	aacgtaccac	tttaataaaa	aatggcagga	gattctctct	1440
cccactttct	cttacgctga	agctagattc	tcaggaaaag	cacaaattac	cgatacgaat	1500
ctctttttcc	ctaaattttc	tggaaaaaat	actgcaagag	aaaatgagct	gctcatccat	1560
gcaaaatttg	gttcccctaa	tgaacctata	aaacctgaaa	ctacctctat	actcatccac	1620
ggacaatttt	gttctctgcc	actcagccta	gtttctaate	acctagcccc	cttccatttg	1680
aagaaattga	cattttccct	ccatacggat	ggaggtaagt	ttgtaaccaa	aggaaacctc	1740
caagctctta	ttgagaatcc	agactatccc	gacctaaata	atacgcgtat	cctaaccctc	1800
gatcttcttc	tttctcttga	tgaatcctca	acttcacctt	cttcaaaaga	cttgaaaatc	1860
cagggttctg	gagagatatt	ttctttgcct	ctggattcta	ttactaagac	ctatgggaaa	1920
caagtgcgtc	tctctcctta	ttttggttcc	tctggagact	tgaactttgt	agtaaaactac	1980
aatcctaaag	atcagaataa	gctcacacta	ctatctaact	ttaagtcaga	agctctccta	2040
ggagaactga	agttagtcat	ggacttttct	atgaagctat	cttcagggaac	tcagggaact	2100
ctccagtggg	aagtgaagcc	agaacgttat	gcaagtttct	ttaaaaaacgc	atcatgctct	2160
cccacctggt	tgcttcatag	aactgcaaat	gtacgcttag	acatctcaaa	actctcttgt	2220
ccagaggaaa	ccaaagggtt	atcttgtctc	acgcttcttg	ccgcaggagg	acttgaagggt	2280
tcattagaag	caacaccgtt	gatcttctat	gataatgtgt	ctaaagagac	ttttattatt	2340
aatgacttta	aagggttctt	gcgagccaac	aatttagacg	ctaaaataga	atatgatctt	2400
aaaggctcgt	gtctagctcc	taggcaagac	tctaaaactc	ttgcagaatt	ttcattagaa	2460
ggacaggtag	atcatctggt	ctctccagag	tctcgagaat	ttaaacaaac	tgcaaatggg	2520
attcacatac	cctcttcggt	cattgctgga	atcattccca	tgtctccagg	attgaaagct	2580
cagatatcct	cgcttgacag	ccctagaatc	aacgtatcaa	ttaaaaatgc	gttccgattt	2640
ggagaaggcc	ctgtcgacat	tatggtcgac	tctgaaaacc	ttcaagctca	gattccactg	2700
atcttaaacg	aaaagtccat	cttactgaga	gagaatctaa	cagcgcacct	tagtataaat	2760
gaagatgtaa	ataaggcttt	octacaagag	tttaatcccc	tcttagcagg	gggagcctac	2820
tcacaatacc	cagtaacctt	agagatcgat	aaacaaaact	tctatctccc	tatacgcccc	2880
tattcttttg	agaattcccg	catccaatcc	gcaacattgg	atatggggaa	aatctcaata	2940
gcaaatacag	gaactatgta	tgctcttttc	caattccttg	atattacgga	tcaaaagcaa	3000
tttgtagaat	cttgggtcac	tccaattttc	ttttctgtac	aaaaaggctc	tatcatttgt	3060
aagcgytcg	acgcccttat	cgatcgtaga	atccgccttg	ctctatgggg	gaaaactgat	3120
atcgctcatg	atcgtctggt	tatgaccttg	ggtatcgatc	ctgaagttat	taagaaatac	3180

tttcataaca	cctctttaaa	aactaaaaac	ttcttcctta	taaaaatccg	aggatccatc	3240
togtctcctg	aagtggactg	gtcttcagct	tacgctagaa	tcgctctatt	aaaaagctac	3300
agtcttggga	acccgttttag	tagtcttgcc	gataagctat	tctcttctct	tggcgactct	3360
acccccccac	caacagtaca	ccccttccct	tgggaaaaat	ctaattttga	ttctatagaa	3420
aataaatag						3429

Seq ID 17

atgtcatctc	ctgtaaataa	cacaccctca	gcaccaaaca	ttccaatacc	agcgcccacg	60
actccaggta	ttcctacaac	aaaacctcgt	tctagtttca	ttgaaaaggt	tatcatttga	120
gctaagtaca	tactatthgc	aattgcagcc	acatcaggag	cactcggaac	aattctagggt	180
ctatctggag	cgctaaccac	aggaatagggt	attgcccttc	ttgttatctt	ctttgtttct	240
atggtgcttt	taggtttaat	ccttaaagat	totataagtg	gaggagaaga	acgcaggctc	300
agagaagagg	tctctcgatt	tacaagtggag	aatcaacggt	tgacagtcac	aaccacaaca	360
cttgagactg	aagtaaagga	tttaaaagca	gctaaagatc	aacttacact	tgaaatcgaa	420
gcatttagaa	atgaaaacgg	taatttaaaa	acaactgctg	aggacttaga	agagcagggt	480
tctaaactta	gcgaacaatt	agaagcacta	gagcgaatta	atcaacttat	ccaagcaaac	540
gctggagatg	ctcaagaaat	ttcgtctgaa	ctaaagaaat	taataagcgg	ttgggattcc	600
aaagttgttg	aacagataaa	tacttctatt	caagcattga	aagtgttatt	gggtcaagag	660
tgggtgcaag	aggctcaaac	acacgtttaa	gcaatgcaag	agcaaatca	agcattgcaa	720
gctgaaattc	taggaatgca	caatcaatct	acagcattgc	aaaagtcagt	tgagaatcta	780
ttagtacaag	atcaagctct	aacaagagta	gtaggtgagt	tgtagagtc	tgagaacaag	840
ctaagccaag	cttgttctgc	gctacgtcaa	gaaatagaaa	agttggccca	acatgaaaca	900
tctttgcaac	aacgtattga	tgcgatgcta	gcccagagc	aaaatttggc	agagcaggct	960
acagcccttg	aaaaaatgaa	acaagaagct	cagaaggctg	agtcagagtt	cattgcttgt	1020
gtacgtgatc	gaactttcgg	acgtogtgaa	acacctccac	caacaacacc	tgtagttgaa	1080
ggtgatgaaa	gtcaagaaga	agacgaagga	ggtactcccc	cagtatcaca	accatcttca	1140
cccgtagata	gagcaacagg	agatggtcag	ttaa			1173

Seq ID 18

atgcgatatg	accccaactt	aatagaaaaa	aatgggcaac	aattttggaa	agaacatcga	60
agctttcaag	caaatgaaga	cgaggataaa	gtaaaatatt	atgtttttaga	catgttccct	120
tatccttcag	gagcaggtct	acatgtaggc	caccttattg	gctatacagc	gacagatatt	180
gttgcgagat	ataaaagagc	acggggattc	tcagttcttc	atcctatggg	ctgggatagc	240
tttggtttgc	ccgcagaaca	atatgcgatt	cggacaggaa	cccactctaa	agtcacgacc	300
cagaagaata	tcgctaattt	taaaaaacag	ctctccgcta	tgggattttc	gtatgatgaa	360
ggacgagaat	ttgctacgag	tgatcccgcac	tattatcatt	ggactcagaa	acttttcctt	420
tttctttatg	atcaaggact	cgcttatatg	gccgacatgg	cagtgaacta	ctgtccagaa	480
cttggtaccg	tattatcgaa	tgaagaagtt	gaaaaatggat	tctcaataga	agggggatat	540
cctgtagagc	ggaaaatgct	tcgtcagtg	attctcaaaa	tcacagcata	tgccgataag	600
ttattagaag	gtctcgatgc	cctagattgg	ccgaaaaatg	taaagcagtt	acagaaaaat	660
tggatagggg	aatctgaagg	ggctctcgta	acatttcatt	tgacgcaaga	gggcagctca	720
gaagccttca	ctaccgcct	agacacttta	ttaggggtga	gtttcttagt	gattgctcct	780
gagcaccag	atttagattc	tatagttagt	gaagagcaaa	gagacgaagt	cacagcctat	840
gtacaagaga	gtctcaggaa	aagtgaacga	gatcgcata	gctctgttaa	gacaaaaaca	900
ggggtcttta	caggaaaacta	tgccaagcac	cccattacag	ggaacctttt	acctgtttgg	960
atttcagatt	atgtcgtctt	aggctatggc	acaggcgtag	ttatgggagt	cccagcgcac	1020
gacgagagag	atcgagagtt	tgctgaaatg	ttttctcttc	cgattcatga	ggtgattgat	1080
gataacgggg	tttgatttca	tagcaattac	aacgactttt	gtcttaattg	cttgtctggg	1140
caagaagcta	aagattatgt	aatcaactac	ctggagatgc	gttctctcgg	aagagctaag	1200
actatgtaca	ggctgcgaga	ctggctcttc	tctagacaga	gatattgggg	agagcctatc	1260
cccatcatc	atattgaaga	tggaacgcac	cgctctttag	aagatgatga	gctgcctctt	1320
ctccctccga	atattgatga	ctatcgtccc	gaaggattcg	gtcaggggtcc	tttagcggaag	1380
gtcgaagatt	gggtgcatat	ctacgacgag	aagacaggtg	gaccaggatg	tagagagact	1440
tatactatgc	cacagtgggc	aggctcttgc	tggtattatc	ttcgtttctg	tgatgcacac	1500
aactctcagt	tgccctggag	taaagaaaaa	gaaagctatt	ggatgcctgt	agatctttac	1560
attggagggtg	cagaacacgc	tgctcttcat	cttctttact	cgagattttg	gcatcgagtc	1620
ttctatgacg	cgggtcttgt	ctcaacacca	gaacctttta	agaaactgat	caaccaggga	1680
cttgtgttag	cctcttcata	cgaattcct	ggtaagggat	acgtaagcat	agaagacggt	1740
aggggaagaaa	atggaacgtg	gatctcaact	tggtggagaga	ttgtggaagt	tagacaagag	1800
aaaatgtcta	aatcgaaact	caatgggtgtg	gatcctcagg	ttttgattga	agagtatgggt	1860
gcagatgcct	tacgtatgta	cgctatgttt	tcgggacctt	tggaataaaa	taaaacctgg	1920
tccaatgaag	gtgttggggg	gtgccgtcgt	ttcctaaatc	gttttttatga	tttgggtgact	1980
tcgtcagagg	ttcaagatat	agaagaccgt	gacgggctgg	ttctcgctca	caaattgggtg	2040
tttaggatta	cagaacatat	tgaaaaaatg	tctttgaata	ccataccgctc	ttcattttatg	2100

gaattttctga	acgatttttcc	aaagcttcca	gtctatttcta	aacgtgcctt	gtctatggct	2160
gttcgtgat	tggagcctat	agctccgcat	atcagcgaag	agttatgggt	tatattggga	2220
aaccaccag	ggattgatca	agcagcatgg	cctcaaatag	acgagagtta	cctagtgtgt	2280
caaaactgtga	cttttgttgt	tcaaggtaaat	gggaagttac	gaggacgtct	cgaggtagcc	2340
aaagaagctc	ctaaagaaga	agtttttatct	ttgtctcgaa	gtgtagttgc	aaagtatcta	2400
gagaacgctc	aaatacgaaa	agaaatttat	gttcctaata	aactagttaa	ttttgtccta	2460
tga						2463

Seq ID 19

ttggagaaaa	taatgttcgg	agaaaattct	cgagacattg	gagttctttc	taaagaagga	60
ctatttgata	aattagagat	agggcatagct	tcagatatta	caattcgtga	taaagtgtct	120
tgtggagaaa	tcaaaaagcc	agaaactata	aattaccgta	cgtttaaac	tgaaaaagggc	180
gggtctatttt	gtgaaaaaat	ctttggctcct	actaaagatt	gggaatgttg	ctgcggaaaaa	240
tataaaaaaa	taaaacataa	aggaattgtc	tgcgatcgat	gcggagtga	agttactctt	300
tcaaaagtcc	gtcgtgaacg	tatggctcat	atcgagttag	cagttcctat	tgtccatatt	360
tgggtttttca	aaacaactcc	atcacgcatt	ggtaattgtc	ttggaatgac	agcttcggat	420
ctggaacgtg	tcatttatta	tgaagaatat	gtagttattg	accaggttaa	gacagacctt	480
actaaaaaac	aacttcctta	tgatgcgcaa	tatcgtgaag	ttgttgagaa	gtggggtaag	540
gacgctttcg	ttgctaaaaat	gggtggcgaa	gctatctatg	atttgcctaa	atccgaagat	600
ctccaaagct	tgcttaaaaga	tcttaaaagag	cgtttacgca	aaacaaaatc	tcagcaagcg	660
agaatgaagt	tagccaaaacg	tcttaaaaatc	attgagggat	ttgtttcttc	atccaaccac	720
cggagtgga	tggattataa	aaatatccca	gtagttccac	ctgatctcgg	tcctcttggt	780
cctttagatg	gcggtcgttt	tgcgacttct	gatttaaacg	atctctaccg	ccgtgtaatt	840
aatcgtaaca	atcgtcttaa	agcgatctta	cgtttaaaaa	caccagaggt	tattgttcgt	900
aatgaaaagc	gtatgcttca	agaagctggt	gatgctcttt	ttgataacgg	tcgacatggt	960
catccggtca	tgggagctgg	aaaccgacca	ttgaaatcct	tgtcagaaat	gttaaaggga	1020
aaaaatggac	gcttcgctca	aaatctttta	ggaaaacgtg	ttgactactc	tggacgttct	1080
gtaattattg	ttgggtcctga	attgaagttt	aatcaatgcg	gattgcctaa	ggaaatggct	1140
ttagagctat	tcgaaccctt	tattattaaa	agactaaaag	atcaaggcag	cgtttatatac	1200
attcgttctg	ctaagaaaaat	gattcaacga	ggagcccag	aagtttgga	cgttctcgaa	1260
gagatcatta	agggacatcc	agtacttctt	aaccgagcac	ctacattgca	ccgttttagga	1320
attcaagctt	tcgaacctgt	attgatagaa	ggtaaaagcga	ttcgtataca	ccccctagtt	1380
tgcgcagcgt	ttaacgctga	cttcgacgga	gaccaaattg	ccgtgcacgt	tcctctatct	1440
gtagagggcac	aactggaagc	taaagtttta	atgatggctc	aaagatatga	cagacaacat	1500
tcctcaggaa	agcctgtggc	tattccttcg	aaagatatga	ctttaggatt	atattatctg	1560
atggcagatc	ctacctattt	tcctgaagaa	catggaggaa	aaactaagat	atttaaagat	1620
gaaatcgaag	tattgcgtgc	tttaataaac	gggtggattca	ttgatgatgt	tttcggagat	1680
cgctcgtgatg	aaacaggacg	cggatccat	attcatgaaa	agattaaagt	gcgtattgat	1740
ggacaaatta	ttgagacaac	cccaggaagg	gtattgttca	acagaattgt	tcctaaagaa	1800
ctcggcttcc	aaaattacag	catgccaaat	aagcgtataa	gtgagcttat	tttacagtgc	1860
tataagaaaag	tcgggtttaga	agctactgta	cgtttcttag	atgaccttaa	agatcttgga	1920
tttattcaag	ctacaaaagc	cgcaatctct	atgggattga	aggatgttcg	tattcctgat	1980
atcaagagtc	atatcctcaa	agatgcctac	gataagggtg	ctatcgtcaa	aaaacaatat	2040
gatgatggga	tcattactga	aggggagcgt	cattccaaaa	ctattagtat	ttggactgaa	2100
gtttccgaac	agctttcaga	tgccctctat	gttgaaatta	gcaaaacaaac	acgtagcaag	2160
cataacccct	tgttctctgat	gattgattct	ggagcccag	gtaataaatc	ccagttgaaa	2220
cagttgggag	cgttacgagg	attaatggcg	aagccaaacg	gagcaattat	tgaatctcca	2280
attacttcga	acttttagaga	aggattgaca	gttttagagt	actccatctc	ctcacacggt	2340
gcgagaaaag	gttttagccga	tacagctcta	aaaactgccg	actccggata	cttaaacacgt	2400
agacttgtag	acgtagccca	agacgtgatc	attaccgaaa	aagattgcgg	tacgttaaat	2460
cacattgaga	tttctgcaat	aggtcaaggt	tctgaagaac	tcttgccctc	taaagatcgt	2520
atctatggac	gtactgtagc	tgaagatgtc	tatcaaccag	gtgataaaag	tcgactactt	2580
gctcaatcgg	gtgatgtact	caactccgta	caagcagaag	caattgatga	tgccgggtatt	2640
gagacaatta	agattcgttc	tacattaacg	tgcgaaagtc	ctcgcggagt	ttgtgcaaag	2700
tgttacggcc	tcaatttagc	taatggtaga	ctcattggca	tgggtgaagc	tgttggtatt	2760
attgctgctc	agtcgattgg	ggaacctgga	actcagttaa	caatgagaa	gttccacctt	2820
gggggtattg	ctgctacgtc	ttcaactcct	gagattatta	cgaatagtga	tggatatctt	2880
gtctacatgg	atctccgtgt	tgttctgggg	caagaaggct	acaatcttgt	cttgaataag	2940
aagggagctt	tacatgttgt	aggtgatgaa	ggctgtactc	tcaatgagta	taaaaagctg	3000
ctttcaacca	agtctataga	aagcctagag	gtatttcctg	tagaactagg	agtgaataat	3060
cttggtgctg	acggaaactcc	tgtttctcaa	ggacaaagaa	tcgcagaagt	tgaactacac	3120
aatattccta	tcattttgcga	taagcctggc	tttattaaat	atgaagattt	ggttgaggga	3180
atctctacag	agaaagtgtg	gaacaagaac	acaggacttg	ttgaacttat	tgtgaaacag	3240
caccgagggg	agttacatcc	tcagattgct	atctatgatg	atgctgactt	gtcagaactt	3300

gtcggaaacct	atgacgattcc	ttcaggagcgc	attatctctg	tagaagaagg	acaacggggtt	3360
gatccaggta	tggtgttagc	tagacttccct	cgcggagcta	tcaaaacaaa	agatattact	3420
ggcgggtttgc	ctcgtgttgc	tgaattagta	gaagctcgta	aacctgaaga	tgctgctgac	3480
atcgccaaaa	ttgatgggtg	tggtgacttc	aaaggaattc	aaaagaacaa	acgtattctt	3540
gttgctgtgtg	atgaaatgac	aggtatggaa	gaagaacatc	tgattccatt	aaccaaacat	3600
ttgattgtac	aacgtggaga	tagtgtgatt	aaagggcagc	agcttaccga	tggttttagtt	3660
gttcctcatg	aaatcctaga	aattttgcgga	gttcgtgaac	ttcagaagta	cctggtaaat	3720
gaggtgcagg	aagtttaccg	tctgcagggc	gttgacatta	acgataagca	tattgaaatt	3780
attgttcgtc	agatgttaca	aaaagtacga	attactgacc	caggtgatac	gactctgtct	3840
tttggcgaag	acgtgaataa	gaaagagttt	tatgaagaaa	atcgtcgtac	cgaagaagac	3900
ggtggtaagc	cagctcaagc	tgttcccgtc	ttattgggaa	ttacgaaagc	ttctttgggt	3960
acggaatcgt	ttatatcagc	agcttctttc	caagacacaa	ctcgagtctt	aacagatgca	4020
gcttggttga	gcaaaaaccga	ctacctttct	ggatttaagg	aaaatgtgat	catgggtcat	4080
atgattcctg	gtggtacagg	ctttgaaacg	cataagcgta	ttaagcagta	tctagaaaaa	4140
gaacaagaag	atctcgtttt	tgattttgtt	agtgaacag	agtgtgtttg	ttaa	4194

Seq ID 20

atggatacac	agtcctctat	aggtaacgaa	gaatggcgta	ttgcaggaaac	ctctgtagtt	60
tctgggatgg	ccttaggtaa	agtatttttt	ttgggaacat	cccccttgca	tgttcgtgag	120
ctgactctac	ctcaagaaga	agtcgaacat	gaaatacatc	gttattataa	agctttgaat	180
cgctcgaagt	ctgatatcgt	agcttttagaa	caggaaagtt	cgggacagca	aggccttcaa	240
gaggtttcct	ctatcctaca	agcacacttg	gagattatga	aagacctctt	ccttacggag	300
gaggtgggtca	atactatccg	taaggatcgt	aaaaatgcag	aatatgtctt	ttcttcagtc	360
atgggtaaaa	tagaagagtc	gttaacagca	gtccgcggga	tgcttctgtt	tgtagatcgt	420
gttcaagata	tccatgatata	ctccaataga	gttatcggcc	atctgtgttg	ccaacataag	480
agttcttttag	gagaattctga	tcagaatttg	atcatattct	ctgaggaatt	gacccctca	540
gaagtgcgca	gtgctaactc	tgcttatatc	cgagggtttg	tctcattagt	gggagcagcc	600
acatcacata	cagctatcgt	ctcgcgagca	aagagcattc	cctatcttgc	taatatctcc	660
gaggagcttt	ggaacatcgc	aaagcgatat	aatggcaagt	tagtcttaat	cgacggttat	720
cgtggagagc	taatctttta	tcctaaacca	gcgactctac	aaagctgcta	taaaaaagag	780
ctttccgtgg	ttgcccatac	ctctcagaga	ttagtaagaa	agtccctaca	cccgattgtt	840
tcttcgcgtg	caggcagtg	taaggacgta	gaagatctat	tagagaactt	ccctcaaacc	900
tccataggcc	tctttcgttc	tgagttttta	gctgtaattt	taggacgcct	acctacacta	960
agagagcaag	tagatcttta	cgagaagctc	gcacgttttc	ctggagattc	gccctcagta	1020
ctgcgcctct	ttgatttttg	tgaagacaaa	ccttgtcctg	gaataaaaaa	taagaaagaa	1080
cgttctatac	gatgggttgc	agactatagt	gtgattcttg	aggatcagct	ccaagcaatt	1140
gctaaagcct	ctttgcaagg	ctccataaag	gttctcattc	caggagtgtc	tgacgtttct	1200
gagattatag	aagtcaaaaa	gaaatgggag	accatccaga	cgagggtccc	taaaggccat	1260
aagggtttctt	gggggactat	gatagaattt	ccttctgcag	tttggtgat	tgaagagatc	1320
cttctgaat	gtgattttct	ctctatagg	acgaatgacc	ttgtccaata	tactttggga	1380
atttccagg	aatccgctct	tcctaaacat	ctaaatgtaa	ctttgcccc	agcagtgatc	1440
cgcattgatt	accatgtact	tcaagctgct	aagcaaaatc	aggttcctgt	tagcatttgt	1500
ggagaggccg	cagggcagct	cagctctgact	cctttattta	taggcctagg	agttcaagag	1560
ctctcagtag	ctatgcctgt	aatcaataga	cttcgcaatc	atatcgccct	gctagagttg	1620
aactcctgcc	ttgaaattac	agaagccctt	ttacaagcta	aaacatgctc	tgaagttgaa	1680
gaacttttaa	atagaaacaa	caaaatcaca	tcataa			1716

Seq ID 21

atgcgacaag	aaaaggatag	tttaggaatc	gtagaagttc	ctgaggataa	gttatatgga	60
gctcaaaacta	tgcggttctag	gaattttttt	tcttggggac	ctgagttgat	gccttatgag	120
gtaatacag	ctctcgtag	gattaaaaaa	tggtgtgctc	aggcgaatca	agatttagga	180
tttttggtatt	ccaagcattg	cgatatgatt	gttgctgctg	ccgatgagat	tttagaggga	240
ggttttggaag	agcattttccc	tttaaaagt	tgccagacag	ggagcggcac	acaatcta	300
atgaatgtga	atgaggtgat	tgccaatctt	gccattcgtc	atcacggagg	ggtgttaggc	360
agtaaggatc	ctatccatcc	taatgatcat	gtgaataagt	cccaatcgtc	caatgatgtt	420
ttccctacag	caatgcatat	cgctgctgtg	attagtttaa	aaaataagtt	aattccagct	480
ttagatcata	tgattcgggt	gttagatgct	aaagtggag	aatttcgtca	tgatgtaaag	540
ataggacgga	cccatcttat	ggatgcggtg	cctatgacgt	tgggtcagga	attttctggt	600
tatagcagtc	aattgcgtca	ctgcttagag	agtatagcat	tttcttttagc	tcatttatat	660
gaacttgcca	ttggagctac	tgctgtagg	actgggttga	atgttctcta	agggttcgtg	720
gaaaagatca	tccattattt	aagggaaggaa	acagatgaac	cgtttattcc	agcttccaat	780
tatttttctag	cactgtcctt	tcacgatgct	ttagtagatg	cccatgggtc	tttagcaact	840
ttagcatgtg	ctttaactaa	gatagctacg	gatttgagct	ttttaggttc	aggaccag	900
tgtaggtttg	gtgagttatt	tttccctgaa	aatgaaccag	gatcttctat	catgcctggt	960

aaagtcaatc	ctacgcagtg	tgaagctctc	caaatgggtt	gtgctcaagt	tcttggaat	1020
aatcaaacag	tgattattgg	aggaagtcga	ggaaattttg	agcttaagt	gatgaagcct	1080
gtgatcatct	ataatttcct	gcagtcctgt	gatctccttt	ctgaggggat	gagggctttc	1140
tctgaattct	ttgtgaaagg	attaaaagta	aataaagctc	gtttacaaga	taatatcaat	1200
aattctttga	tggtggttac	agcttttagct	cctgtattag	gttacgacaa	gtgttcgaaa	1260
gcagcactga	aagcatttca	tgaatctata	tctttgaagg	aggcgtgtct	agctttggga	1320
tatctttctg	agaaggaatt	tgatcgttta	gtggttcctg	agaatatggt	gggaaaccat	1380
tag						1383

Seq ID 22

atgggactat	atgatcgtga	ctatatatacaa	gattctcagag	tgcagggaaac	ttttgcttca	60
agagtctatg	ggtggatgac	agcaggggcta	atcgtaactt	catgtgttgc	cctgggtctt	120
tatttttctg	gattatacag	aagttttattt	tctttttggg	gggtgtgggtg	tttcgctacg	180
ctagggcgtgt	ctttctttat	caactctaaa	atccagacac	tatcggtttc	tgtgttaggg	240
ggccttttcc	ttctctactc	aacattagaa	ggaatgtttt	ttggaacctt	acttcctgtc	300
tacgtcgtc	aatatggcgg	aggggtgatc	tgggcccgtt	ttggatcagc	agccttggtg	360
tttggcttag	cagcagtata	cggagcgttt	acaaaaagcg	atcttactaa	aattagtaag	420
attatgactt	ttgctttgat	aggacttctg	ctagtgtactc	tagtctttgc	tgtgttttcg	480
atgtttgtat	ctatgccttt	aatctactta	ttgatttgct	atctagggct	cgtcatcttt	540
gttggtattga	cagctgctga	tgcgcaagca	attcgtcggg	tttcttctac	tataggggat	600
aacaatacct	tgagttacaa	actctctttg	atgtttgctc	ttaagatgta	ttgcaatgtc	660
atcatggtat	tttggtatct	gctgcagatt	ttctcatctt	caggaaaccg	agactaa	717

Seq ID 23

atggtagcga	aaaaaacagt	acgatcttat	aggtcttcat	tttctcatte	cgtaatagta	60
gcaatattgt	cagcaggcat	tgcttttgaa	gcacattcct	tacacagctc	agaactagat	120
ttaggtgtat	tcaataaaca	gtttgaggaa	cattctgctc	atgttgaaga	ggctcaaaca	180
tctgttttaa	agggatcaga	tctgttaaat	ccctctcaga	aagaatccga	gaaggttttg	240
tacactcaag	tgctctttac	ccaaggaagc	tctggagaga	gtttggatct	cgccgatgct	300
aatttcttag	agcatttttc	gcactttttt	gaagagacta	cagtatttgg	tatcgatcaa	360
aagctgggtt	ggtcagattt	agatactagg	aatttttccc	aaccactca	agaacctgat	420
acaagtaatg	ctgtaagtga	gaaaatctcc	tcagatacca	aagagaatag	aaaagaccta	480
gagactgaag	atccttcaaa	aaaaagtggc	cttaaagaag	tttcatcaga	tctccctaaa	540
agtcctgaaa	ctgcagtagc	agctattttc	gaagatcttg	aaatctcaga	aaacatttca	600
gcaagagatc	ctcttcaggg	tttagcattt	ttttataaaa	atacatcttc	tcagtctatc	660
tctgaaaagg	attcttccatt	tcaaggaatt	atcttttctg	gttcaggagc	taattcaggg	720
ctaggttttg	aaaatcttaa	ggcgccgaaa	tctggggctg	cagtttatct	tgatcgagat	780
attgtttttg	aaaatcttgt	ttaaaggattg	agtttttatat	cttgtgaatc	tttagaagat	840
ggctctgccg	caggtgtaaa	cattgtttgtg	acccattgtg	gtgatgtaac	tctcactgat	900
tgtgccactg	gttttagacct	tgaagcttta	cgtctgggta	aagatttttc	tcgtggaggga	960
gctgttttca	ctgctcgcaa	ccatgaagtg	caaaataacc	ttgcagggtg	aattctatcc	1020
gttgtaggca	ataaaggagc	tattgttgta	gagaaaaata	gtgctgagaa	gtccaatgga	1080
ggagcttttg	cttgcggaag	ttttgtttac	agtaacaacg	aaaacaccgc	cttgtggaaa	1140
gaaaatcaag	cattatcagg	aggagccata	tctcagcaa	gtgatattga	tattcaaggg	1200
aactgtagcg	ctattgaatt	ttcaggaaac	cagtctctaa	ttgctcttgg	agagcatata	1260
gggcttacag	attttgtagg	tggaggagct	ttagctgctc	aagggacgct	taccttaaga	1320
aataatgcag	tagtgcaatg	tgttaaaaac	acttctaaaa	cacatgggtg	agctatttta	1380
gcaggtagctg	ttgatctcaa	cgaaacaatt	agcgaagtgt	cctttaagca	gaatacagca	1440
gctctaactg	gaggtgcttt	aagtgc aaat	gataagggtta	taattgcaaa	taactttgga	1500
gaaattcttt	ttgagcaaaa	cgaagtggag	aatcacggag	gagccattta	ttgtggatgt	1560
cgatctaate	ctaagttaga	acaaaaggat	tctggagaga	acatcaatat	tattggaaac	1620
tccggagcta	tcactttttt	aaaaaataag	gcttctgttt	tagaagtgat	gacacaagct	1680
gaagattatg	ctgggtggagg	cgttttatgg	gggcataatg	ttcttctaga	ttccaatagt	1740
gggaatattc	aatttatagg	aaatataggt	ggaagtacct	tctggatagg	agaatatgtc	1800
ggtgggtggtg	cgattctctc	tactgataga	gtgacaattt	ctaataactc	tggagatggt	1860
gtttttaaag	gaaacaaagg	ccaatgtctt	gctcaaaaat	atgtagctcc	tcaagaaaca	1920
gctcccggtg	aatcagatgc	ttcatctaca	aataaagacg	agaagagcct	taatgcttgt	1980
agtcagtgag	atcattatcc	tcctaaaact	gtagaagagg	aagtgccacc	ttcattgtta	2040
gaagaacatc	ctgttggttc	ttcgacagat	attcgtgggtg	gtggggccat	tctagctcaa	2100
catatcttta	ttacagataa	tacaggaaat	ctgagattct	ctgggaacct	tggtggtggt	2160
gaagagtctt	ctactgtcgg	tgatttagct	atcgtaggag	gaggtgcttt	gctttctact	2220
aatgaagtta	atgtttgcag	taaccaaact	gttgtttttt	ctgataacgt	gacttcaaact	2280
ggttgtgtat	cagggggagc	tatttttagct	aaaaaagtag	atatctccgc	gaaccactcg	2340
gttgaatttg	tctctaattg	ttcagggaaa	ttcgggtggtg	ccgtttgcgc	tttaaaccgaa	2400

tcagtaaaaca	ttacgggacaa	tggctcggca	gtatcattct	ctaaaaatag	aacacgtctt	2460
ggcgggtgctg	gagttgcagc	tcctcaaggc	tctgtaacga	tttgtggaaa	tcagggaac	2520
atagcattta	aagagaactt	tgtttttggc	tctgaaaatc	aaagatcagg	tggaggagct	2580
atcattgcta	actcttctgt	aaatattcag	gataacgcag	gagatatcct	atttghtaagt	2640
aactctacgg	gatcttatgg	aggtgctatt	tttgtaggat	ctttgggtgc	ttctgaaggc	2700
agcaaccac	gaacgcttac	aattacaggc	aacagtgggg	atatcctatt	tgctaaaaat	2760
agcacgcaaa	cagccgcttc	tttatcagaa	aaagattcct	ttgggtggagg	ggccatctat	2820
acacaaaacc	tcaaaattgt	aaagaatgca	gggaacgttt	ctttctatgg	caacagagct	2880
cctagtgggtg	ctgggtgtcca	aattgcagac	ggaggaactg	tttgttttaga	ggcttttggg	2940
ggagatatct	tatttgaagg	gaatatcaat	tttgatggga	gtttcaatgc	gattcactta	3000
tgccgggaatg	actcaaaaat	cgtagagctt	tctgctgttc	aagataaaaa	tattatttttc	3060
caagatgcaa	ttacttatga	agagaacaca	attcgtggct	tgccagataa	agatgtcagt	3120
cctttaagtg	ccccttcatt	aatttttaac	tccaagccac	aagatgacag	cgctcaacat	3180
catgaaggga	cgatacgggt	ttctcgaggg	gtatctaaaa	ttcctcagat	tgctgctata	3240
caagaggga	ccttagcttt	atcacaaaac	gcagagcttt	ggttggcagg	acttaaacag	3300
gaaacaggaa	gttctatcgt	attgtctgcg	ggatctatc	tccgtatttt	tgattcccag	3360
gttgatagca	gtgcgcctct	tctacagaa	aataaagagg	agactcttgt	ttctgccgga	3420
gttcaaatta	acatgagctc	tctacacccc	aataaagata	aagctgtaga	tactccagta	3480
cttgagata	tcataagtat	tactgtagat	ttgtcttcat	ttgttcctga	gcaagacgga	3540
actcttctct	ttctctctga	aattatcatt	cctaaggga	caaaattaca	ttctaattgcc	3600
atagatctta	agattataga	tctaccaat	gtgggatatg	aaaatcatgc	tcttctaagt	3660
tctcataaag	atattccatt	aatttctctt	aagacagcgg	aaggaatgac	agggacgcct	3720
acagcagatg	cttctctatc	taatataaaa	atagatgtat	ctttaccttc	gatcacacca	3780
gcaacgtatg	gtcacacagg	agtttgggtct	gaaagtaaaa	tggaagatgg	aagacttgta	3840
gtcgggtggc	aacctacggg	atataagtta	aatcctgaga	agcaaggggc	tctagttttg	3900
aataatctct	ggagtcatta	tacagatctt	agagctctta	agcaggagat	ctttgctcat	3960
catacgatag	ctcaaagaat	ggagttagat	ttctcgacaa	atgtctgggg	atcaggatta	4020
ggtgttgttg	aagattgtca	gaacatcgga	gagtttgatg	ggttcaaaca	tcacttcaca	4080
gggtatgccc	taggcttggg	tacacaacta	gttgaagact	tcttaattgg	aggatgtttc	4140
tcacagttct	ttggtaaaac	tgaaagccaa	tcctacaaa	ctaagaacga	tgtgaagagt	4200
tatatgggag	ctgcttatgc	ggggattttta	gcaggtcctt	ggttaataaa	aggagctttt	4260
gtttacggta	atataaaca	cgatttgact	acagattacg	gtactttagg	tatttcaaca	4320
ggttcatgga	taggaaaagg	gtttatcgca	ggcacaagca	ttgattaccg	ctatattgta	4380
aatcctcgac	ggttttatatc	ggcaatcgta	tcacacagtg	ttccttttgt	agaagccgag	4440
tatgtccgta	tagatcttcc	agaaattagc	gaacagggtg	aagaggttag	aacgttccaa	4500
aaaactcgtt	ttgagaatgt	cgccattcct	tttggatttg	ctttagaaca	tgcttattcg	4560
cgtggctcac	gtgctgaagt	gaacagtgtg	cagcttgctt	acgtctttga	tgtatatcgt	4620
aagggacctg	tctctttgat	tacactcaag	gatgctgctt	attcttgga	gagttatggg	4680
gtagatatcc	cttgtaaagc	ttggaaggct	cgcttgagca	ataatacggg	atggaattca	4740
tatttaagta	cgtatttagc	gtttaattat	gaatggagag	aagatctgat	agcttatgac	4800
ttcaatgggtg	gtatccgtat	tattttctag				4830

Seq ID 24

atgctaataca	agctatggcg	agctacttat	gaagggatgt	atacatttct	tgtgggtgcg	60
ttgctaaggt	tgcgctaccg	tatgcaagtt	gaaggggtggg	acaccttaaa	cataaatcct	120
aagcaggggt	gtttgtttct	tgccaatcac	gttgcaagag	tggaccctat	tatcttagaa	180
tatctatttt	ggagtcgatt	ccatgttcgt	cccttgccgg	tcgagtattt	gtttcatagt	240
cgcggtgttc	aatggttttt	aaattctgta	agatccattc	ctatccctca	acttgttccc	300
ggtaaaagaga	gtaagcgctc	tttagaacgt	atgaacgtat	gttatgaaga	agcctcacga	360
gctttaaata	gaggggaaag	cctccttctt	tatccttcag	gaaggttatc	gagaacaggg	420
aaagagggaaa	tcgttaataca	gtattctgct	tatgtgttat	tacatagagt	tatggaatgc	480
aacgtgggtt	tagtcagagt	ttcaggctta	tgggggagtg	cgttttcgcg	ctataagcag	540
aactctacac	ctaagttagg	ccctgcgttt	aaagaagctt	ttcgagcttt	actgcgtcgt	600
gggatttttt	ttatgcctaa	aagggtttgta	aaaattactc	tatgtcaagt	agatcatctt	660
tttttaagc	aattttccaac	aaaacaagac	ctaaatactt	ttttggcttc	ttggtttaat	720
caaggagatg	acaatttgcc	catagaagtt	ccttacgcgt	aa		762

Seq ID 25

atgatcaata	aagaattaga	tattgggtatt	ttaggaaaaa	ttgctggggc	tattaaacaa	60
attagtattg	aatccatcca	aaaggcctct	tctggtcatc	caggacttcc	cctaggatgc	120
gcagaacttg	ctgcctatatt	atatgggttat	gtcctgcggc	aaaatccacg	tgatcccat	180
tggattaata	gggatcggtt	tgtcttgctca	gcaggtcatg	gatctgytct	tctctattct	240
tgtttgcatc	ttgcgggatt	tgatgtttcc	ttagaggatc	ttcaggaatt	tcgccagctt	300
cactcccga	ctcccgggca	tcccaggtac	ggcgaaactg	tgggagtcga	agcaacgaca	360

ggctcctctgg	gacaggggatt	aggcaatgct	gtcggcatgg	cgctctctat	gaagatgttg	420
gaatcccgat	tcaatcgccc	aggacatgag	atttttaacg	gaaaaatcta	ttgtttggca	480
ggggatggct	gttttatgga	gggagtcagc	cacgaagttt	gtagctttgc	aggctcttta	540
aatttaaata	atcttggtgt	catctatgac	tacaataatg	ttgttctcga	tggatatctt	600
aatgaaatta	gtgttgagga	tacaaaaaaa	cgttttgaag	cctatggctg	ggatgtatat	660
gaaattgatg	ggtatgattt	tacccatatt	catgagacat	tctcgagcat	caaacggggg	720
caggaacgtc	ctgtattagt	gattgcacat	acaattattg	gtcatggttc	gcctaaggaa	780
gggacaaata	aggctcatgg	ttctccttta	ggagtgcgaag	ggactcatga	aacaaaacag	840
ttttggcatc	tccttgaaga	aaagtttttt	gtccctcctg	cagtaaagaa	cttctttgct	900
cataaaaatac	aagaagatcg	aaaagcacag	gagcaatggc	tggatgaagt	tcgtgtttgg	960
tcaaaacagt	tcccagaatt	acacgaagaa	ttcgttgctg	tgacctctca	taagttacct	1020
aaaaacttag	aatccttggt	gcagagtgtg	gaaatgccag	actctatagc	tggccgggct	1080
gcttcaaata	aactgatcca	agtattagta	cagcacattc	cttatttgat	tggaggggtcc	1140
gcagatcttt	caagctcaga	tggaaacttg	attgcgaatg	agaaagtcac	ccatacgtat	1200
gacttctctg	gaaggaacat	taaatacggc	gttcgtgagt	ttggtatggc	cacaatcatg	1260
aatggtttag	cttatagcca	ggtatttcgt	ccttttggtg	gaacattttt	agttttttct	1320
gactatagtc	gtaatgcaat	tcgcttggcc	gcattatcta	aattaccagt	catctatcaa	1380
tttaccatg	attctatatt	tgttggagaa	gatggacctc	cgcatcagcc	tgtggaacaa	1440
ttgatgtctt	tgcgcgcgat	ccctggattg	tatgtaatac	gtcctgccga	tgctaatagaa	1500
gtagaggag	cgtggattgc	aggattaaag	cacacaggtc	ctacagtcac	tgtcttctcg	1560
cgacaagcat	tgccacacat	gcctgctgcg	catcggcctt	ttaaagatgg	tgtagggtcgt	1620
ggtgcttata	ttgtctttaa	agagtcagga	gaaaaaccag	actatactct	cttcgctaca	1680
gggtcagaag	tttcttttagc	tctttctgta	gctaaagaac	tcgaacactt	ggataagcaa	1740
gtgcgtgtag	tttctttccc	ttgttgggag	ccttttgaag	ctcaagatgt	ggactacaaa	1800
cagagtattg	taggcggaga	tcttgggaatt	cgtgtctcta	tagaagcagg	atctgctttg	1860
gggtggtata	agtatatcgg	atctgaaggt	ttagctatcg	ctatggatag	attcggatac	1920
tcaggagctt	ctgatgatgt	atcagaagaa	tgtggcttta	ctacagagca	aatccttcag	1980
aggattctct	ctcaatag					1998

Seq ID 26

atgtctacca	tgcaaaattg	tccacatttt	ggtgtatgtg	gaggatgctc	gtttcctcag	60
tccaattatt	ctgaactcct	aaagaaaaag	gaagaactcc	ttcatcagtt	attcgctcct	120
ttagttccct	cggtatgat	tgctcctatc	atcccatggt	ctccctcttt	aagaggaaga	180
aataaaatgg	aattctcctt	ttttcaaact	tatgaaggag	aaaaaagttt	aggattcatc	240
agctctacaa	aaccaaaaga	aggaattcca	gtgactacat	gtctgcttat	ccatgagcag	300
actatggata	ttttaaaact	cactcgcgaa	tggtgggata	agcaccacga	gcttatggcg	360
tacttccccc	ctaaaaacaa	aggctcgtaa	tgacacactc	ccgtccgtac	ggggagcccc	420
cagcaaaact	ttatgggtgat	cctaacaaca	tcaggaactc	cagaatatag	ggtaaacgaa	480
gcctgtatag	atgaatggaa	agagattctc	ctatcgtctt	ctctaatacat	agcatcgatc	540
tattgggaag	aaaaggtagc	tgacacgtgg	atttctacat	attatgaaac	taaaactgcta	600
tacggagccc	cctcgatata	gcaaaaaactg	tccttaccta	gtgacggtaa	ctctgcctct	660
tttagtttgc	gtcccagaag	tttcttccaa	cctcagatta	ctcaggcagc	gaaaattata	720
gaaactgcga	aagagtttat	aaaccccgag	gggtcggaaa	cgcttcttga	tctctattgt	780
ggagcggaa	ctatagggat	tatgctctct	ccctatgtca	aaaatgtgat	tggcgttgag	840
attattcctg	atgctgtagc	ttcggctcag	gagaacatca	aagcgaataa	caaagaagat	900
tgcgtagaag	tctattttaga	agatgcgaaa	gcgttctgca	aaaggaatga	aaattgtaaa	960
gctcctgatg	tcattattat	tgatccccc	cgttgtggtg	tgcaaaagtaa	agtacttaaa	1020
tatattttac	gtataggatc	tccaaaaaatt	gtctatatct	cttgcaaccc	taaaaacacag	1080
tttcaagagt	gcgcggacct	aatctctggg	ggatatcgca	taaaaaagat	gcagcctatt	1140
gaccaatttc	cctattcgac	gcacctagaa	aatattatct	tactagaaaag	agagatcgat	1200
ctctag						1206

Seq ID 27

atgacatcag	gagttagtgg	aagttcaagt	caggatccca	cattggctgc	gcaattggca	60
caatcctctc	aaaaagcagg	aaatgctcag	agcggtcacg	atactaagaa	tgtaacaaag	120
caaggggctc	aagcagaagt	cgtgctgga	ggctttgagg	atctcattca	agacgcttca	180
gcgcaaagta	caggaaaaaa	agaagctaca	tcttcaacta	ctaaaaagtag	taaggagaa	240
aaaagcgaaa	aatctgggaa	atctaaatcc	tcaacttcgg	tagcaagcgc	aagtgaact	300
gcaacggcac	aagccgtaca	aggctcctaag	ggattaagac	aaaataatta	tgactcacc	360
agccttccta	ctcctgaggc	acagaccatc	aatggatttg	tacttaaaaa	aggcatgggt	420
acgttagcac	tctcgggttt	agttatgacc	ttgatggcca	atgctgccgg	agagtcttgg	480
aaagcttcat	tccaatcaca	aaaccaagcg	atccggtcac	aagtcgaatc	cgctcctgct	540
attggagaag	ctattaaaag	gcaagcgaac	catcaagcat	cagctacaga	agcacaggca	600
aaacagtcct	tgattagtgg	tattgtaaac	attgtaggat	ttacagtttc	tgtaggagcg	660

ggatattttct	ctgctgcaaa	aggagctacc	tcgggttttaa	aatctgcttc	ctttgccaaa	720
gaaacaggtg	cctcagctgc	tggaggtgct	gcttccaaaag	ctttaacttc	tgcaagttct	780
tctgttcaac	agactatggc	ttcgactgcc	aaggcgga	caacagcagc	gagttctgcg	840
ggatcagcag	ccaccaaaagc	tcagcgaac	ctaaccgatg	atatggccgc	agcagcttca	900
aaaatggcct	ctgatggagc	ttcgaaaagct	tcaggaggac	tctttggcga	agtcttaaat	960
aaacctaact	ggtctgaaaa	agtctccaga	ggtatgaacg	tagtgaaaac	tcaggggagcg	1020
cgtgttgcat	catttgcagg	aaatgctctt	tcttctctta	tgcaaatgag	tcaattaatg	1080
catggactca	cagcggctgt	tgaaggctct	tctgcggggc	agacagggaat	agaagtcgcc	1140
catcatcagc	ggttagcagg	acaagcagag	gctcaagcag	aagtcttgaa	acaaatgtct	1200
tcgggtttatg	gtcagcaagc	aggacaagca	ggacaattac	aagagcaagc	tatgcaatca	1260
tttaatactg	ccttacaana	actacaaaat	attgcggaact	ctcaaacaca	aacaacatct	1320
gctatcttta	attaa					1335

Seq ID 28

atgagtatag	tcagaaatc	tgcattgcc	cttccgtgtt	taagcagatc	cgaaaccttt	60
aaaaaagtta	ggtcgcatat	gaaatttatg	aaagtcctta	ctccatggat	ttatcgaaaa	120
gatctttggg	taacagcatt	cttactgaca	gcaattccag	gatcttttgc	acatactctt	180
gttgatatag	caggagaacc	tcggcatgct	gctcaagcaa	caggagtttc	tgagagatgg	240
aaaattgtta	taggaatgaa	agttccggat	gatccttttg	ctataactgt	aggatttcaa	300
tatatgtatg	ggcatttgca	acccttagag	gcagtaactc	ctcaatgctc	tgtataacct	360
aatggtataa	ccccggacgg	aacgggtatt	gtgggtacaa	actatgccat	cgggatgggt	420
agtgttgctg	tgaaatgggt	aaatggcaag	gtttctgaac	ttcccatgct	ccctgacacc	480
ctcgattctg	tagcatcggc	agtttctgca	gatggaagag	tgattggagg	gaatagaaat	540
ataaatcttg	gcgcttctgt	tgctgtgaaa	tgaggagacg	acgtgattac	acaacttctt	600
tctcttcttg	atgctatgaa	tgcttctgtt	aacggaattt	cttcagatgg	ttctataatt	660
gtaggaacca	tggttagacgt	gtcatggaga	aataccgcag	tacaatggat	cggggatcag	720
ctctctgtta	ttgggacttt	aggaggaact	acttctgttg	ctagtgcatt	ctcaacagat	780
ggcactgtga	ttgttaggagg	ttctgaaaat	gcagattctc	agaactcatg	ctatgcttat	840
aaaaacgggtg	ttatgagcga	tatagggacc	ctcggagggt	tttattcttt	agcacatgca	900
gtatcttcag	atgggttctg	gattgtagga	gtatccacga	actctgagca	tagatatcat	960
gcattccaat	atgctgatgg	acagatggta	gatttaggaa	ctttaggagg	gcctgaatct	1020
tatgctcaag	gtgtgtctgg	agatggaaaag	gtaattgtgg	gtagagcaca	agtaccatct	1080
ggagattggc	atgcgttctt	atgtcctttc	caagctccga	gccctgctcc	tgtccatggg	1140
ggaagcactg	tcgtaactag	ccagaatcca	cgtggaatgg	tagatatcaa	tgctacgtac	1200
tctcttttga	aaaatagcca	acaacaacta	caaagattgc	ttatccagca	tagtgcaaaa	1260
gttgaaaagt	tatcctcagg	agcaccatct	tttacaagtg	tgaaagggtg	gatctcaaaa	1320
cagagccctg	cagtgcagaa	tgatgtacag	aaagggacgt	ttttaagtta	cggttcccaa	1380
gttcatggaa	acgtgcagaa	tcagcaattg	ctcacaggag	cttttatgga	ctggaaactc	1440
gcttcagctc	ctaaatgcgg	ctttaaagta	gctctccact	atggctctca	agatgctctc	1500
gtagaacgtg	cagctcttcc	ttacacagaa	caaggcttag	gaagcagtgt	cttgtcaggt	1560
tttgaggagc	aagttcaagg	acgctatgac	tttaatttag	gagaaactgt	tgttctgcaa	1620
ccctttatgg	gcattcaagt	tctccacctt	agtagagaag	ggtattctga	gaagaatggt	1680
cgatttcttg	taagctatga	ttctgtagcc	tactcagcag	ctactagctt	tatgggtgog	1740
catgtatttg	cctccctaag	ccctaaaatg	agtacagcag	caactttagg	tgtggagaga	1800
gatctgaatt	cacatataga	tgaatttaag	ggatccgtct	ctgctatggg	aaactttgtc	1860
ttggaaaatt	ctacagtgag	tgttttaaga	cttttgcctt	ctcttgctat	gtactatgac	1920
gtaagacaac	agcaactcgt	gacgttgtca	gtagttatga	atcaacaacc	cttaacaggc	1980
acactaagct	tagtaagcca	aagtagctat	aatcttagct	tctaa		2025

Seq ID 29

atgtttcgtt	gcatattggt	tggtattttc	ctactcacgt	gtttttcttc	tgggcggggg	60
ttatattact	tattctgttc	ccatgatttt	tctatagggc	ctaaggaaaa	atcacgatcc	120
gtgtggattg	aggaagaaaa	agagttcacg	gattccggtat	tacatcatct	gccatcgcaa	180
catcagcatt	tgcatattct	ttgtttccaa	gggtttttac	tacagaagca	acaaaagttt	240
tctcaagcag	aaaagatttt	ctctaaagtt	tacgacgagg	ctcaggacgg	tccttttctt	300
tttaaggagg	aaattttagg	atcccgactg	atcaacagtt	tttttttaga	aaaaacagac	360
gtcatggaga	ccattctttg	tcttctgaat	cagcgtgtgc	ccaactcccc	ttactaccac	420
ttatttaagg	ctctagtatg	ctataagcaa	aagctatacc	gtgaggtcat	agagcaacta	480
gcctactggc	aagaagagaa	aactcgagcg	cttgcctcct	tattgaatat	aagtattgaa	540
cagctgctaa	cagattttct	gttagattat	atttctgcgc	attctctgat	agaacagaaa	600
atgttccccg	aaggcagagt	aattcttaat	cgcaatatca	atagggttatt	aaaacacgaa	660
tgtgagtggg	atgcgaagac	atacgatcgt	attgcatctc	ttcttagccg	gagttatttt	720
ctagagttgg	tagaatctaa	gtctgcagat	atttattttg	attattatga	gatgggtgct	780
ttctatctca	aaaagatcta	tatttttagag	cagtgtcctt	atgcagaact	tctccccgag	840

gaagagcttg	tttccttgat	tatggaacac	gtgtttatoc	ttcctaaaga	taaattatat	900
cctttaattc	agctcctaga	gatgtggcag	aagcattatg	ttcacccaaa	tagttcttta	960
gtagttcaga	tattggtaga	ccgcttttct	acacatatgg	aaggggctat	tcggttttgt	1020
gaggctttag	tttcctttct	tggattggaa	gaattacatc	agcaaattat	taccactttt	1080
gaagagctgc	tttcaaataa	agtacagcag	ataaaaaactg	aagaggctaa	acaatgtggt	1140
gccctacttc	atatttttga	tccttctatt	tcctattagt	aaaaattagc	tctttcttcg	1200
gatacattac	aaaatatagt	ttctggggac	gacgagcagc	atacaaaaact	ccgcaattac	1260
ctagatcttt	gggaagccat	acagtcttat	gatattgatc	gccaacagct	cgttcatcac	1320
ttagtttatg	gtgcaaaaga	tcttttgaaa	aaaggaggaa	atgatgaaaa	ggcattgaac	1380
cttcttcagc	tggctctgag	gtttacaagc	tacgatatag	aatgcgaaag	tggtgtgttt	1440
ctttttataa	aacaggcgta	taagcaagca	ctgtcttccc	atgccattgc	tcgtctttta	1500
aagttagaaa	aatttatatc	ggaagcgaat	attcctctta	tagtgattag	tgaggctgag	1560
aaggccaatt	tcttagcaga	tgctgaatat	ctttttgctc	atgaagacta	tgacaaatgc	1620
tatttgata	gcattgtggt	gactaagggtg	gccccctccc	ctcaatccta	tcgcttagca	1680
gggttatgcc	tgatggaaaa	taagcgttac	gacgaagcct	tagaatttct	ctgtatgctc	1740
tcacccaata	atagtatcaa	cgactataag	acgcagaagg	catttagcatt	ttgccaaaaa	1800
catcaatcta	aggaccgagc	tgctctcttag				1830

Seq ID 30

atgttgggca	aagaagaaga	gtttacgtgt	aaacaaaagc	agtgtttgtc	acattttgtt	60
accaatctga	cgtccgatgt	atgtgcttta	aaaaatcttc	cagaagtctg	taaggagctt	120
ttattttcta	aatactcccg	ttcagtttta	ggtttgcgag	cactttttgt	aaaagaattt	180
ctatctaatg	aagaggatgg	agatgtttgt	gacgaagcct	atgaacttga	aaccgatgta	240
cagaaagctg	cggactttta	ccaaagggtt	cttgataatt	ttggggatga	ttctgtagga	300
gagcttggcg	gagcccacct	ggctatggaa	aatgtctcta	ttttggctgc	taaagtttta	360
gaggatgctc	gaattggcgg	atccccgcta	gaaaagtcca	caagatacgt	ctatttcgat	420
caaaagggtac	ggggggagta	tttatattac	cgagacccta	ttttgatgac	ttcggccttt	480
aaagacatgt	ttttgggtac	ttgtgatttt	ttattcgata	cctattctgc	tttaatccct	540
caagttcgtg	cctattttga	aaaactgtat	cctaaagatt	ctaaaacacc	cgcatctgcc	600
tatgccacat	cattacgagc	taaagtttta	gattgtatac	ggggacttct	tctgcgga	660
actttgacaa	atctaggatt	tttcggtaac	ggtaggtttt	ggcaaatctt	gattcacaag	720
ttacaagggtc	ataaccttgc	agagtgcga	cgtttaggag	atgaatccct	aacagagcct	780
atgaaagtta	ttccttcatt	tgtaagtaga	gccgagcctc	atcatcacca	tcacgaagct	840
atgatgcaat	atcgaagagc	tttaaaagag	cagctcaagg	gacttgctga	acaagcaaca	900
tttagtgagg	agatgtcttc	ttcaccgagt	gttcagttgg	tatacggaga	ccctgatggc	960
atttataaag	tagctgctgg	atctcttttt	ccttattcaa	atcgttctct	tacagatctc	1020
atagactatt	gtaaaaaaat	gcctcatgaa	gatcttgtac	agatttttaga	gagcagtgtt	1080
tctgcaagag	aaaaccgcgg	gcataagtct	cctcgtgggt	tagaatgcgt	agaatttggt	1140
tttgatatac	ttgctgattt	cggtgcatac	cgcgatttgc	aacgacatcg	gacgctgact	1200
caagaacgac	agttactctc	tacacatcat	ggatacaatt	ttcctgtgga	gcttctagat	1260
actcctatgg	aaaaatctta	tcgagaagct	atggagaggg	cgaatgaaac	ctataatgag	1320
attgttcagg	agttccctga	ggaagctcag	tatatgggtc	ccatggctta	caatatacgt	1380
tggtttttcc	atgtaaatgc	tcgggctttg	caatggattt	gtgagttacg	ctcacagcct	1440
caagggtcatc	aaaattaccg	cactatagct	acaggttttag	tgcgagaggt	tgtcaagttc	1500
aatcctatgt	acgaattatt	tttcaaattt	gtagattatt	ctgacataga	tttaggacgg	1560
ttaaatcagg	aatgcgaaa	agaaccaacg	acctaa			1596

Seq ID 31

cgctgatga	aggcagtgg	ctctcacaag	agcaggacct	cctctataca	caggcagtag	60
agctcttatt	ctttatttta	cagcatcctc	aag			93

Seq ID 32

gacggagtta	atttttgaaa	tcttttccag	ccgtgccctt	actgcagagg	caaatatcca	60
agtccaactt	gcacaagcac	gttatctctt	tctctgtctt			99

Seq ID 33

ggcttacgac	ggttttgcaa	acgatactcc	atagtagtat	cggaaagtgg	agagcctttc	60
tgcttactca	agaaaaaaaa	gatctttttg				90

Seq ID 34

aacttcccaa	tctgtgatag	aagttccaga	ttcagagggg	attgcagaga	cgaggatctc	60
tgcggaagaa	atcgatacga	ggctttccct	gacgacaaga	cagaagggtca	tctttgctct	120
tgcgacactc	ttgctcttag	caagtattgc	tgcttccata	gtcacgggat	ttggtggatt	180
gacagtcacg	caagttctcc	ttggtgcttc	tgtaggatcg	gcgggttgctt	ctgtaacact	240

cacctatgggtt	tcctcaggat	tttcctacgt	cgctaccaa	ctgaaagcaa	gattgaatat	300
cag						303
Seq ID 35						
ttttttcttg	tgttgccggg	attattacta	ggctctcctt	tacctcagat	gtcgttcaga	60
ttg						63
Seq ID 36						
tttttcataa	aatattctct	ttcaaacgga	tatgggattc	aaaaatatct	gcaaacaagg	60
ctctcagcta	tacctgaatg	gcatttttcc	ggaacgaata	ctagctcgaa	aattaaaaaa	120
ctgtgcgaag	agctatccca	gaactgctct	taccatagaa	gtactggtat	cctcgggtctt	180
aggagctct						189
Seq ID 37						
tgcagctact	ctgtttactc	actatggagc	ctcctacaac	ttttgatgct	gatgaaatca	60
gaaaagaaaa	aatcaaaatt	cttcaacgta	tctcaccatt	ttcagaagg	tcttcgattg	120
tccgaggaca	atatggtcca	ggaacggttc	aaggagtctc	ggctcttggc	tatcgtgaag	180
aagagaatgt	tgacaaagat	tcccag				207
Seq ID 38						
gcacaagcgt	tcgggagcct	actcctcagg	atgcta			36
Seq ID 39						
gagctactca	tttcctacca	gagaaaaaca	agctcagcta	ttggaaaaaa	gaactttacg	60
accagctcgc	agtgt					75
Seq ID 40						
gaaggaagag	aagatcttcc	atcagcactt	aggaaaggca	gccccacaag	cggcaacagc	60
aacttcagga	gtgcagccta	ctgcggatcc	tgttgc			96
Seq ID 41						
cgcttagga	gtacaacaaa	cacctccag	tcaagtcctc	aatgggattg	cactcactct	60
atctatttat	gtgatgttcc	ccacgggagt	ggctatgta			99
Seq ID 42						
gctccccaag	cccgggggtga	caccaagatc	agaggttatc	gaaatcggac	tcgcgcttgc	60
Seq ID 43						
ggacgcttac	tgaaacagtg	tatgctatca	agcttgcgca	aatggctggc	tatactacaa	60
ttattttctca	tcgctcagga	gaaactacgg	acactacgat	tgcagatctt	gctgttgctt	120
tcaacgctgg	tcaaatcaaa	acaggctctt	tatcacgttc	tgagcgtgtt	gcaaaataca	180
atagactcat	ggaaattgaa	gaagagcttg	gatccgaagc	aattttcaca	gattctaattg	240
tattttctta	cgaggattct	gaggaataga	gggattttct	ctattttctat	cttatctcca	300
aatcaagaat	acatcgcgca	tctatgggcc	ttatctttc			339
Seq ID 44						
agcacaatc	caacagttgc	tctcgcatca	atatttgatg	caaaaactac	aaaatgtcca	60
Seq ID 45						
accgacatac	tcgtcaaat	cattaagaac	atcttcccac	ccctgtggag	aggtaatgtc	60
gtaccccgca	gcaaaaatat	gacaagtatc	tacacacacg	ccaatgggaa	tttgattttt	120
caaattctga	acgaggtaac	ccaattcttc	aaagttactc	ccaat		165
Seq ID 46						
tcttctcgct	gtacacaacg	agaaattgct	gggaggagaa	cggtaaacac	accaaagcca	60
aagagatgta	tggggagc					78
Seq ID 47						
attgatgcca	cccagatcaa	ccttaatgcc	tcccaagttg	acattcacat	taggaaccac	60
agtagctcct	actggagtg	caggacctgt	atgagacgtc	gagtgaagcc	ctccacctgg	120
agtttcat	ataaaggaga	agtctggagc	tggggctgtt	ttccagttaa	tgcctttcaa	180
gcccccaaca	tcacccaaa	tcggacctgt	ttctactttt	gctccacgac	gccatgcaga	240
gggtgtatat	ccactactag	attcttttagc	attccaagga	cgtagacta	cagcagtttt	300
aaatttcatg	ctgagcatca	gatgattgta	atttcctgtg	gctcccagc	gctcttccat	360

tgtagggtttt acgcgtcccg tcca

384

Seq ID 48

gcccttttat	cacgagcttg	tgtggcatca	atcataccag	ctcgttaagtc	cgcatcaatc	60
gccatctgtt	tacctggcat	cgcatccaat	cggaatcggg	cagcaacttc	ggcaacacgc	120
tcggcaccct	tagttactac	gataaac				147

Seq ID 49

aataaggtaa	ttacaggatc	atggcgagtg	ggagcttgtg	agagcatgga	aaccagaaaag	60
ccacotaaat	gcttgaaaaa	aaaggtcgat	agggagaaaag	ccgtaaacad	agagacgata	120
aaggtaaccg	cagaaggaaa	atcc				144

Seq ID 50

ggcatctctg	tgatgatgat	gctctcacga	tgtttatctt	cattctcttc	tacatgcaga	60
cgagctcgaa	ctttaatctt	tctctgtcct	gtagtatacg	tggagcgaat	tccttcagaa	120
ccgcagataa	ttcctcctgt	agggaaaatca	gggcctggca	tgacttgtaa	aatctcatcc	180
acagaagcct	gtggatttgc	aagcagaaga	agtgtagctt	ctataagttc	ccctaaattg	240
tgtgggggga	tattcgttgc	catcccaaca	gcaattcctg	aagaaccatt	gcaaagaaga	300
ttcggaattt	tagaaggaaa	aactacaggc	tctgtttttg	tttcatca		348

Seq ID 51

agtggcagaa	ttatctccgt	catgttggtc	gctccaccgt	gtgagctgca	tagtgacttg	60
atagatcccg	acttgtttga	gtttaaccac	aggctcaata	tctgcatatc	tgtggaagtc	120
aggggtcccg	ttacgactca	cactttttaga	gggtatagct	gcaacatgag	tttcaattgt	180
agtgttaggg	gcaacgtaat	aaccattccc	aggataatac	gtatagagat	tcgcagcctg	240
acatccagtt	tttctataat	aactaaatgt	aagcgcactc	cgagcagact	gaggatcact	300
aatattattg	catactggag	tttgcgatac	gtctgtctta	gaatagatat	taaaaccgtc	360
agagagtgtg	gtagcattaa	gttgagaacc	ttccgcagac	acattaccct	tcacaataaa	420
ttcacatgga	gaagtcgtgg	tatc				444

Seq ID 52

agtgatcgta	actctttttc	aatctctgtg	agtttttcaa	aatacgcaga	ttttatagca	60
cctctgaact	ggagotttacg	caccagaagg	gcgttcaacc	cagtagaagc	cgccctcatt	120
cgattttcac	attcttcaag	agttaggcca	gaagttaactg	ttccagaaat	aaggaactca	180

Seq ID 53

atgccttgga	ttttctataa	acttttcaat	ataaacattg	gggttattaa	aaccggcttc	60
ggcttctgca	cgtgcggcag	aaaacgctct	atagaattcg	tccttttctt	taacaatacg	120
aattcctctt	ccccacctc	cagcaacggc	tttaataaca	atagggaaac	ctattttttc	180
agctatttt						189

Seq ID 54

atttccatgt	cttccataga	aaccctttct	tcaccgacaa	cttccatacg	cttgccgatt	60
tctgaacctt	tctctagaaa	ctgtgctgct	tttttcacag	caccacccca	gcctgaaacc	120
ttctcttcta	aaatttgtcc	tacctgggtc	aaatatattg	accaagaaat	caaagggtct	180
attgaaggat	acctacgtgc	gtcagctcgt	gcttttgaaa	gaccacagaa	cgctccgact	240
acagctaattg	tagat					255

Seq ID 55

ggagaccttg	aacattataa	acacatccat	ggaccttttt	caaaatcaag	ccaccatggc	60
aaacgtcata	agcgccacaa	ttatttaaatg	ttcctacagt	gtcgatataa	gactctatgc	120
ggtgatcagg	aatca					135

Seq ID 56

agggtatctt	tcaatgcato	cccgccgato	acaacaagtc	gtagggactc	caaacaggaa	60
ttttgttttt	ttgctgtttt	cagaata				87

Seq ID 57

tcaataaacc	cactagcacc	acagcggttca	ttaggccttg	ccatacaata	ccagctagaa	60
gaatggccga	tacaggacac	ttcgatttca	cgagacccta	agcgactttc	ctccacaaac	120
acatccgtgt	catatagaaa	tgcttctgag	atcttttctt	gtaattcttc	tttatcacgg	180
actaaaaata	tcccaatact	agatcccaaa	tgtgcagttt	ttacaatcat	agggaaagaa	240
aatgtctcta	taagattc					258

Seq ID 58

ccactaggtc ccgcaccaat aacaacacaa tcaaattcctt gggcatatt ctcactcact 60
 gtaatcaaga tttcaaaaag aacccccctt cataaatgca tgcattctcat taagaagagg 120
 accctgtgct tattt 135

Seq ID 59

ggagaacaac cattcctgtt tcatcccaact tcacagcaaa gtttgtctct gtatcatcac 60
 tatataggca ccctacaatc gtctttccat cactggaaac accctctgca aaagattgca 120
 ttcctcaga aaatattcca agatcaacaa gtgcaccgtt taccacttc acagcgcggc 180
 aagacggatc ttgatccgag attccta 207

Seq ID 60

gtgacatcta agtacgcttc catgcgtcca tcaattccta atccagcttc acatacacgt 60
 aaaatagcac gcgctcctac atctcggctg acaagattcc catacgagg atacatact 120
 tctaagaaat accaaggagc tctgtctct ccacaaggac gttccgaacc atctggaaat 180
 actatgcgct ttgaagaatc cccaggcacc cacacacgac cgccctcacc acgcacagac 240
 tctgaaatta atcgtagctt atcccttcca ggaattgctg taggg 285

Seq ID 61

MVNPIGPGPIDETERTPPADLSAQGLEASAANKSAEAQRIAGAEAKPKESKTDSEVERWSILRSVNALMSLADKLGIIASS
 NSSSSTSRADVDSTTATAPTPTPTDYYKTQAQTAYDTIFTSTSLADIQAALVSLQDAVTNIKDTAATDEETATAAEW
 ETKNADAVKVGAIQITELAKYASDNQAILDSLGLKTSFDLLQAALLQSVANNKAAELLKEMQDNPVVPGKTPAIAQSLVD
 QTDATATQIEKDGNAIRDAYFAGQNASGAVENAKSNNSISNIDSAKAAIATAKTQIAEAQKKFPDSPILQEAQMVIQAE
 KDLKNIKPADGSDVPNPGTTVGGSKQQGSSIGSIRVSMILLDDAENETASILMSGFRQMIHMFNTENPDSQAAQQELAAQA
 RAAKAAGDSDAAAALADAQKALEALGKAGQQGILNALGQIASAAVVSAGVPPAAASSIGSSVKQLYKTSKSTGSDYKT
 QISAGYDAYKSINDAYGRARNDATRDVINNVSTPALTRSVPRARTEARGPEKTDQALARVISGNSRTLGDVYSQVSALQS
 VMQIQSNPQANNEEIRQKLTSAVTKPPQFGYPYVQLSNDSTQKFIKLESLFAEGSRTAAEIKALSFEFETNSLFIQQVLV
 NIGSLYSGYLQ

Seq ID 62

MKKLLKSALLSAAFAGSVGSLQALPVGNPSPDLLIDGTIWEAGAAGDPCDPCATWCDALSLRAGFYGDYVFDRIKVDAP
 KTFMSGAKPTGSAAANYTTAVDRPNPAYNKLHDAEWFNAGFIALNIWDRFDVFC'TLGASNGYIRGNSTAFNLVGLFGV
 KGTTVNANELPNVSLSNGVVELYTDTSFSWSVGARGALWECGATLGAEFQYQAQSKPKVEELNVCNVSQFSVNPKPKGYK
 GVAFLPTDAGVATATGTSATINYHEWQVGASLSYRLNSLVPIYIGVQWSRATFDADNIRIAQPKLPTAVLNLTAWNPSL
 LGNATALSTTDSFSDFMQIVSCQINKFKSRKACGVTVGATLVADKWSLTAEARLINERAHVSGQFRF

Seq ID 63

MSVNPSPGNSKNDLWITGAHQHPDVKEGVTSANLGSHRVTASGGROGLLARIKEAVTGFFSRMSFFRSGAPRGSQQPSA
 PSADTVRSPLPGGDARATEGAGRNLIKKGYQPGMKVTIPQVPGGGAQRSSGSTTLKPTRPAPPPPKTGGTNAKRPATHGK
 GPAPQPPKTGGTNAKRAATHGKGPAPQPPKGILKQPGQSGTSGKKRVSWSDED

Seq ID 64

MGINPSGNRSPDDVWVRGAQGDSSSTQGTGATNSNLGAHNVTSTSQPVASKAKQLWQTVREFFLGKSPDSSQGASGP
 AMQSPSGPTIRPTRPAPPPPTTGGANAKRPATHGKGRAPQPPTAGSSSGSEQPTAMSSSEVAKLVSELKDAVHSHAESQKV
 LKKVSQELQTKWTDWENNRGPDYLLHGYRVIALRQQTYTEQSMLEGTSSSTGVPVQAVTVAKDAVTQTVRGAIKNLENP
 KPGNDPDGVLMOVVISLIGIEPTLDPGESIQNFLFTRVSDFGDDSDIDYTSDIARLGSALDRVRENHPNEMPRIWIALA
 RELGAHVSHATSVRIANAGKNHTRDVVRMANESSRLLQGMKVLVSGAWANTMTVLIGDLFE

Seq ID 65

MKTLWHFVSKAFLSIVGLCCGVVLAFFVIFALIASLNGDATFVSLPDAQGEVKDLGKTAPIIAVIEKMDVIASSKNTA
 KTIQNILEGFEKAPLKDRVKGIVIDMDCPGGEVFEIDRIYSMLRFWKERKGFPIYIYVNGLCASGGYVS CAATKIYATS
 SSLIGSIGVRSGPFFNVKEGLNRYGVESDLLTAGKDKAPMNPYTPWTSHDREERQATLDFLYGQFVDIVTQNRPLLTKEK
 LVHTLGARIFSPKAKQEGYIDVVGATKEQVLQDIVAVCKIEDNYRVIGSGGDGWWKRVASAAASSPLVTGMIKHDIPL
 SHDAAYIPPYLAL

Seq ID 66

MRPHRKHVSSKSLALKQSASTHVEITTKAFRLSMLPKQLILEKSDHLPMPMETIRVVLTSKDKLGTEVHVVAASHGKEILQ
 TKVHNANPYTAVINAFKKIRTMAKHSNKRDRTKHDLGLAAKEERIAIQEEQEDRLSNEWLPVEGLDAWDSLKTLGYVP
 ASAKKKISKKKMSIRMLSQDEAIRQLESAAENFLIFLNEQEHKIQCIYKKHGDGNYVLIIEPSLKPFGCI

Seq ID 67

MAAPINQPSSTTTQITQTGQT'TTTTTVGSLSGHSVTTTSGSAAAQTSQT'TVTLIADHEMQEIASQDGSVAVSFAEHSFSTLP
 PETGSGVATAQSAQAGLFLSLGRTQRRDSEISSSSDGSISRTSSNASSGETSRAESSPDGLDLSLGSERAEAGAEGP
 EGPGLPESTIPHYDPTDKASILNFLKNPAVQQKMQTKGGHFVYVDEARSSFFVRNGDWSTAESIKVSNAKTKENITKP

ADLEMCIAKFCVGYETIHSWTGRVKPTMEERSGATGNYNHMLSMKFKTAVVYGPWNAKESSSGYTPSAWRRGAKVETG
PIWDDVGGKLGINWKTTPAPDFSINETPGGGAHSTSHTGPGTVGATVVPNVNVLGGIKVDLGGINLGGITTNVTTEE
GGGTNITSTKSTSTDDKVSITSTGSQSTIEEDTIQFDDPGQGEDDPAIPGTNTPPPPGPPPNLSSSRLLTISNASLNQVL
QNVROHLNTAYDSNGNSVSDNLQDLGQVKNSENGVNFPTVILPKTTGDTDPGSGQATGGVTEGGGHIRNIQORNTQSTGQ
SEGATPTPQPTIAKIVTSLRKANVSSSVLPQPVATTITPQARTASTSTTSIGTGTESTSTTSTGTGTGSVSTQSTGVG
TPTTTTSTSTGTSATTTTSSASTQTTPQAPLPSGTRHVATISLVRNAAGRSIVLQQGGRSQSFPIPPSGTGTQNMGAQLWAA
ASQVASTLQGVVNAATAGSQSPSSRRSSPTSPRRK

Seq ID 68

MKTSQLFYKTSKNANKSAAVLSNELLEKAGYLFKVSkgvYTYTPLLWRVVSKMNIIREELNAIGGQELLPLHNAELW
QHTGRWEAFTSEGLLYTLKDREGKSHCLAPTHEEVICSFVAQWLSSKRQLPLHLYQIATKFRDEIRPRFGLIRSRELLME
DSYTFSDSPEQMNEQYELRSAYSKIFDRLGLAYVIVTADGGKIGKKGSEEFQVLCSLGEDITICVSGSYGANIEAAVSIP
PQHAYDREFLPVEEVATPGITTEALANFFSIPLHKILKTLVVKLSYSNEEFKFAIGMRGDRQVNLVKVASKLNADDIAL
ASDEEIERVLGTEKGFIPGLNCPIDFFAETTSPTMTNFVCAGNAKDKHYVNVNWDRLPPQYGDFLAEEDTCEPENPG
HPYRIYQGIIEVAHIFNLGTRYTDSFEVNFQDEHGQTQCCWMGTGYGIGVGRTLAACVEQLADDRGIVWPKALAPFSITIAF
NGGDTVSQELAEETIYHELQSQGYEPLDDRDERLGFKLKDSDLIGIPYKLILGKSYQSSGIFEIESRSGEKYTVSPEAFP
TWCQNHLLA

Seq ID 69

MASGIGGSSGLKIPPKDNGDRSRSPSPKGELGSHEISLPPQEHGEGASGSSSHIHSSSSFLPEDQESQSSSSAASSPGF
FSRVRSGVDRALKSPGNFFSAESTSQARETRQAFVRLSKTITADERRDVSAAAATRAVAEDASVSGENPSQGVPTS
SGPEPQRLFSLPVKKQSGGLRLVQTVRDRIVLPSGAPPTDSEPLSLYELNLRSLRQELSDIQNSDQDTPPEEKAEATV
TIQQLIQITEFQCGMEATQSSVSLAEARFKGVETSDEINSLCSELTDPQLQELMSDGDLSQNLDDTADDLEAALSHAR
LSFSLDDNPTPIDNPTLISQEEPIYEEIGGAADPORTRENWSTRLWNQIREALVSLLGMLLSILGSLHLRLRIARHAAA
EAVGRCTCRGEECTSSEEDSMSVSGSPSEIDETERTGSPHDVPRRNGSPREDSPLMNALVGWAHKGAKTKESSESSTPE
ISISAPIVRGWSQDSSVSFIVMEDDHIIFYDVPRRKDGIYDVPSSPRWSPARELEEDVFGDYEVPIITSAEPSKDKNIYMTF
RLATPAIYDLPSRPGSSGSSSRSPSSDRVRSSSPNRGVPPLPVPSPAMSEEGSIYEDMSGASGAGESDYEDMSRSPSPRG
DLDEPIYANTPEDNPFTQNRIDRILQERSGGASASVPEPIYDEIPWIHGRPPATLPRPENTLTNVSRLRVSPGFGPEVRAA
LLESVSVAVMVEAESIVPPTPEPGDGESEYLEPLGGLVATTCKILLQKGWPRGESNA

Seq ID 70

MRFFCFGMLLPFTFVLANEGLQLPLETYITLSPEYQAAPOVGFTHNQNDLAIVGNHNDFILDYKYRSNGGALTCKNLL
ISENIGNVFFEKVNCPSNGGAIYAAQNCITISKQNYAFTTNLVDNPTATAGSLLGGALFAINCSITNNLQCGTFVDNLA
LNKGALYTETNLSIKDNKGPII IKQNRALNSDSLGGGIYSGNSLNIEGNSGAIQITSNSSGSGGGIFSTQTLTISNNKK
LIEISNSAFANNYSNFNPGGGGLTTTFCITLNNREGVLFNNNQSQSNGGAIHAKSIIKENGPVYFLNNTATRGGALL
NLSAGSGNGSFI LSADNGDII FNNNTASKHALNPPYRNAIHSTPNMNLQIGARPGYRVLFYDPIEHELPSFPILNFET
GHTGTVLFSGEHVHQNFTDEMNFYSYLRNTSELRQGVLAVEDGAGLACYKFFQRGGTLLLGQGA VITTAGTIPTPSSTPT
TVGSTITLNLHIAIDLPSILSFOAQAPKIWIYPTKGTSTYTESNPTTITISGTLTLRNSNNEDPYDSLDSHSLKVPILLY
IVDVAAQKINSSQLDLSTLNSGEHYGYQGIWSTYVWVETTTITNPTSLLGANTKHKLLYANWSPLGYRPHPERRGEFITNA
LWQSAYTALAGLHSLSSWDEEKHAASLQIGILLVHQDKNGFKGFRSHMTGYSATTEATSSQSPNFSLGFAQFFSKAKE
HESQNSTSSHHYFSGMCIENTLFKEWIRLSVSLAYMFTSEHTHTMYQGLLEGNSQGSFHNHTLAGALSCVFLPQPHGESL
QIYFPITALAIRGNLAAFQESGDHAREFSLHRPLTDVSLPVGIRASWKNHHRVPLVWLTEISYRSTLYRQDPHELHSKLLI
SQGTWTTQATPVTYNALGIKVKNTMQVFVKVTLSDYSADISSSTLSHYLVNASRMRF

Seq ID 71

MKSSLHWFLISSSLALPLSLNFSFAFAAVVEINLGPTNSFSGPGTYTPPAQTNNADGTIYNLTGDVSI TNAGSPTALTASC
FKETTGNLSFQGHGYQFLLQNDAGANCTFTNTAANKLLSFGGSYLSLIQTNTATTGTGAIKSTGACSIQSNYSCYFGQ
NFSNDNGGALQSSISLSLNPNTLFAKNKATQKGGALYSTGGITINNTLNSASFSENTAANNGGAIYTEASSFISNNKAI
SFINNSVTATSATGGAIYCSSTSAPKPVLTLSDNGLNFI GNTATSGGAIYTDNLVLSGGPTLFKNNSAIDTAAPLGG
AIAIADSGSLSLALGGDITFEENTVVKGASSQTTRNSINIGNTNAKIVQLRASQGNTIYFYDPITTSITAALSDALN
LNGPDLAGNPAYQGTIVFSGEKLSEAEAAEADNLKSTIQQLTLAGGQSLKSGVTLVAKSFSQSPGSTLLMDAGTTLET
ADGITINNLVLNVDSLKETKATLKAQASQTVTLSGSLVDPGNGVYEDVSWNNPQVFSCLTLTADDPANIHTDLAA
DPLEKNPIHGWYQGNWALSQWEDTATKSKAATLTWTKTGYNPNPERRGTLVANTLWGSFVDVRSIQQLVATKVRQSQETR
GIWCEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNLITAAFCQLFGKDRDHFIKKNRASAYAASLHLQHLATLS
SPSLRLYLPGESESEQPVLFDAQISYIYSKNTMKTYTQAPKGESSWYNDGCALELASSLPHTALSHEGLFHAYFPFIKVE
ASYIHQDSFKERNTTLVRSLFDGDLINVSVPIGITFERFSRNERASYEATVIYVADVVRKNPDCTTALLINNTSWKTGT
NLSRQAGIGRAGIFYAFSPNLEVTSNLSMEIRGSSRSYNADLGKQFQF

Seq ID 72

MFEKFTNRAKQVIKLAKEAQRLNHNVLGTEHILLGLLKLQGVAVNVLRNLGIDFDARQEVERLIGYGPEIQVYGDPA
LTGRVKKSFEANEEASLLEHNYVGTEHLLGLHQS DSV ALQVLENLHIDPREVRKEILKELETNQLPSSSSSSSS
SRSNPSSSKSPLGSLGSDKNEKLSALKAYGYDLTEMVRESKLDPVIGRSSEVERLILLCRRRKNPNVLIGRAGVGKTA
IVEGLAQKIILNEVPDALRKKRLITLDLALMIAGTKYRGQFEERIKAVMDEVKRGHGNILFIDELHTIVGAGAAEGAIDA
SNILKPALARGEIQICIGATTIDEYRKHIEKDAALERRFQKIVVHPPSVDETIEILRGLKKYEEHNNVFITEALKAAAT

LSDQYVHGRFLPDKAIDLLDEAGARVRVNTMGQPTDLMKLEAEIENTKLAKQAIGTQEYEKAAGLRDEEKKLRERLQSM
KQEWENHKEEHQVPVDEEAVAQVVSLOTGIPSA RLTEAESEKLLKLEDTLRRKVIGQNDVTSICRAIRRSRTGIKDPNR
PTGSFLFLGPTGVGKSLLAQIAIEMFGGEDALIQVDMSEYMEKFAATKMMGSPPGYVGHEEGHLEQVRRRPPYCVVLF
DEIEKAHPDMDLMLQILEQQRLTDSFGRKVDFRHAIIMTSNLGADLIRKSGEIGFGLKSHMDYKVIQEKIEHAMKKHL
KPEFINRLDESIVFRPLEKESLSEIHLINKLDSRLKNYQMALNIPDSVISFLVTKGHSPMGARPLRRVIEQYLEDPL
AELLKESCRQEARLRTLVENRVAFEREEREEQEALPSPHLES

Seq ID 73

MGLQSRLOHCIEVBSQNSNFDSSQVKQFIYACQDKTLRQSVLKI FRYHPLLKIHDIA RAVYLLMALEEGEDLGLSFLNVQOY
PSGAVELFSCGGFPWKGLPYPAEHA EFGLLLLQIAEFYEESSQAYVSKMSHFQQALFDHQGSVFPSSLWSQENSRLKEKTT
LSQSFLFLQGMQIHPEYSLEDPA LGFWMQTRSSSAFVAASGCQSSSLGAYSSGDVGVIAYGPCSGDISDCYFYGCCGIK
EFVCQKSHQTTEISFLTSTGKPHPRNTGFSYLRDSYVHLPIRCKITISDKQYRVHAALAEATSAMTFSIFCKGKNCQVVD
GPRLRSCSLDSYKGPNDIMILGENDAINIVSASPYMEIFALQGEKFWNADFLINIPYKEEGVMLIFEKKVTSEKGRFF
TKMN

Seq ID 74

MTKIAFSEKAKNPPVEALKKWFENKRSPLWRDNPTPYSVWVSEVMLQQTAEVVIDYFNQWMERFPTIESLAAAKEEDV
IKLWEGLYYSRARHLLLEGARMVMEEFHGKIPDDAISLAQIRGVGPYTVHAILAFAFKRRAAVDGNVLRVLSRIFLIET
SIDLESTRTWVSRIAQALLPHKSPEVIAEALIELGACICKKVPQCHRCFVRQACGAWRENKQFVLPVRHARKKVI FLHRL
VAIVLYDGSLSVVEKRRPKEMMAGLYEFPYIEVEPEEGLQDIEGFTKKMELSLESPLFLGNLKEQRHAFTNHKVHLCP II
FKATSLPQFGELHLLSDIDHLAFSSGHKKIKDALLIYLGDVRSRESIGV

Seq ID 75

MAVSGGGGVQPSDDPGKWNPALQGEQAEGPSPLKESIFSETKQASSAAKQESLVRSGSTGMYATESQINKAKYRKAQDRS
STSPKSKLKGTFSKMRASVOGFMMSGFGRASRVSAKRASDSGEGTSLLPTEMVALKKGNRISPQMGGFLDASGMGGSS
SDISQLSLEALKSSAFSGARSLSLSSSESSSVASFGSPQKAI EPMSEKVNAWTVARLGEMVSSLLDPNVETSSLVRRRA
MATGNEG MIDLSDLGQEEVSTAMTSPRAVEGKVKVSSSDSPEANPTGIPNSNTLERAKEAEKQESREQLSEDQMMLARA
MAGLLTGAAPQEVLSNSVWSPSTVFPFPPKFSGLTPTORS GDKSKHKS PGIEKSTNHTNFSPLREGTVKSAEVKSLPHPE
SMYRFPKDSIVSREEPEAVVKESTAFKNPENSSQNFLPIAVESVFPKESGTGGALGSDAVSSSYHFLAQRGVSLAPLPR
ATDDYKEKLEAHKGPGGPPDPLIYQYRNVAVEPPIVLRSPQPFSGSSRLSVQGKPEAASVHDDGGGSGSGSGDQRRGS
SGQKASRQEKKGKLLSTDI

Seq ID 76

MKRRSWLKILGICLGSSIVLGFLIFLPQLLSTESGKYLVSFLIHKESGLSCSAEELKISWFGRQTARKIKLTGEAKDEVF
SAEKFELDGSLLRLLIYKPKGITLSGWSLKINEPASIDHPSVSHLDPGSLLTYLNDCKI ISEHGFI TMKTVSGSSLSVS
GFYLEKSSEKFMKVCVSEDQQSGNIFIESVLSPDVSI SAQFSSVPVAFKIFIASPFDHLLSYEDIINLSAEATHTND
GKISMTASGEQNQIQMKLQGHIIHKSTFYIVEGSSSFIELKPELASALCNQIIP LSTPITSKQIHATVSYAKIPLDITKWK
HIEITSQAQLPEVAIHPKDPNLALQLRDITKLGIKTEKFS DIRYSSSTVLGGASPSHLNGLISIDNKKHLTKFRLQQAQL
PHTYLRAIFPQPFVINVLDAVYYSLNIEGTYKNAHLEADAILDNPLKLSCSMGAWKNFLFKGQGTYHFNKKWQEILS
PHFSYAEARFSGKAQITDTNLFPPKFSKITARENELLIHAKFGSPNEPIKPETTSILIHGQFCSLPLSLVSNHLAPFHL
KCLTFSFHTDGGKFVTGKNLQALIRNPDYPDLNTRILIPDL LLSLDESSTSPSSKDLKIQSGSEIFSLPLDSITKTYGK
QVRLSPYFGSSGDLNFVNNPKDQNKLTLLSNFKSEALLGELKLVMDFSMKLSSGTQGTLOWEVSPEYASFKNASC
PTCLLHRTANVRDLISKLSCEETKGLSCLTLLAAGGLEGSLEATPLIFYDNVSKETFIINDFKGSLRANNDAKIEYDL
KGSCLAPRODSKT LAEFSLEGQVDHLFSPESEKQFQTANWIHPSSFIAGIIPMSPGLKAQISSLAGPRINVISIKNAFRF
GEGPVDIMVDS ENLQAQIPLILNEKSILLRENLTALHSINEDVNKAFLQEFNPLLAGGAYSQYFVTLIDKQNFYLP
YSFEFRIQSATLDMGKISIAN TGTMYALFQFLDITDQKQFVESWFTPIFFSVQKGSII CKRXDALIDRRIRLALWGKTD
IAHDRLFMTLGIDPEVIKKYFHNTSLKTKNFFLIKIRGSISSPEVDWSSAYARIALLSYSLGNPFSSSLADKLFSSSLGDS
TPPPTVHPFPWEKSNFDSIENK

Seq ID 77

MSSPVNNTPSAPNIPAPPTTPIPTTKPRSSFIEKVII VAKYILFAIAATSGALGTILGLSGALTPIGIGIALLVIFFVS
MVLGLLILKDSISGGEERRLREEVSRFTSENQRLTVITTTLETEVKDLKAADQLTLEIEAFRNENGNLKTAEEDLEEQV
SKLSEOLEALERINQLIQANAGDAQEISSELKLLISGWD SKVVEQINTSIQALKVLLGQEWVQEAQTHVKAMQEIQALQ
AEILGMHNQSTALQSVENLLVQDQALTRVVGELLESENKLSQACALRQEI EKLAQHETSLQQRIDAMLAQEONLAEQV
TALEKMKQEAQKAESFIACVRDRFTFGRRETPTPTPVVEGDESQEEDEGGTPPVSPSSPVD RATGDGQ

Seq ID 78

MRYDPNLIKWKQFQWKEHRSFQANEDEDKVYYVLDMPFPYSGAGLHVGH LIGYTATDIVARYKRARGFSVLHPMGWDS
FGLPAEQYAIRTGTHPKVTQKNIANFKKQLSAMGFSYDEGREFATSDPDYHWTQKLF LFLYDQGLAYMADMAVNYCPE
LGTVLSNEEVENGFSIEGGYPVERKMLRQWILKITAYADKLLLEG LLDALDWPENVKQLQKNWIGKSEGA LVTFHLTQEGSL
EAFTRLDITLGVSLVIAPEHPDLDSIVSEEORDEV TAYVQESLRKSERDRIS SVKTKTGVTGNYAKHPITGNLLPVW
ISDYVVLGYGTGVVMGVPADHERDREFAEMFSLPIHEVIDDNGVC IHSNYNDFCLNGLSGQEA KDYVINYLEMRSLGRAK
TMYRLRDWLF SRQRYWGEPIPIIH FEDGTHRPLEDELPLLPNIDDYRPEGFGQGPLAKADWVHIYDEKTRPGCRET
YTMPQWAGSCWYYLRFCDAHNSQLPWSKEKESYWMFPVDLYIGGA EHAVLHLLYSRWFHVRVFDAGLVSTPEPFKKLINQG

LVLASSYRIPGKGYVSIEDVRENGTWISTCGEIVEVRQEKMSKSLNGVDPQVLIIEYGADALRMYAMFSGPLDKNKTW
SNEGVGGCRRFLNRFYDLVTSSEVQDIEDRDGLVLAHLVFRITHEIEKMSLNTIPSSFMEFLNDFSKLPVYSKRALSMA
VRVLEPIAPHISEELWVILGNPPGIDQAAWPQIDESYLAQTVTFVQVNGKLRGRLEVAKEAPEEVLSSRSVVAKYL
ENAIQIRKEIYVPNKLNVFVL

Seq ID 79

LEKIMFGENS RDIGVLSKEGLFDKLEIGIASDITIRDKWSCGEIKKPETINYRTFKPEKGGLFCEKIFGPTKDWECCECGK
YKKIKHKGIVCDRCGVEVTLTKVRRERMAHIELAVPIVHIWFFKTTSPRIGNVLGMTASDLERVYYEYVVIDPGKTDL
TKKQLLNDQAQYREVVEKWKDAFVAKMGGEAIYDLLKSEDLQSLKDLKERLRKTKSQQARMKLRKLTIEGFVSSSNH
PEWMVLKNIPVPPDLRPLVPLDGGRFATSDLDNLYRRVINRNNRLKAILRLKTPEVIRNEKRMLOEAVDALDNGRHG
HPVMGAGNRPLKSLSEMLKGKNGRFRONLLGKRVDSGRSVIIVGPELKFNQCGLPKEMALELFEFPIIKRLKDQGSVYT
IRSAKMIQGAPEVWDVLEEIIKGHPVLLNRAPTLHRLGIQAFEPVLIIEGKAIRIHPVCAAFNADFQDQMAVHVPLS
VEAQLEAKVLMAPDNIFLPSGKPAIPSKDMTGLGLYLLMADPTYFPEEHGGKTKIFKDEIEVLRALNNGGFIDDVFGD
RRDETGRGIIHIEKIKVRIDGQIETTPGRVLFNRIVPKELGFQNYSMPSKRISELILQCYKKVGLSATVRFLDLDKDLG
FIQATKAASIMGLKDVRIPIKSHILKDAYDKVAIVKKQYDDGIITEGERHSTIISIWTEVSEQLSDALYVEISKQTRSK
HNPLFLMIDSGARGNKSQKQLGALRGLMAKPNGAIIESPITSNFREGLTVLEYSISSHGARKGLADTALKTADSGYLTR
RLVDVAQDVIITEKDCGLTNHIEISAIGQSGEELLPLKDRIYGRVTAEDVYQPGDKSRLLAQSGDVLSNVQAEIIDDAGI
ETIKIRSTLTCESPRGVCAKCYGLNLANGRLIGMGEAVGIIAAQSIGEPQTQTMRTFHLGGIAATSTPEIITNSDGIL
VYMDLRVVLGQEGHNVLNKKGALHVVGDEGRTLNEYKLLSTKSIESLEVFVELGVKILVADGTPVSGQORIAEVELH
NIPICDKPGFIKYEDLVEGISTEKVVNKNLTGLVELIVKQHRGELHPQIAIYDDADLSELVGTYAIPSGAIIISVEEGQRV
DPGMLLARLPRGAIKTKDITGGLPRVAELVEARKPEDAADIAKIDGVVDFKGIQKNKRILVVCDEMTGMEEEHLIPLTKH
LIVQRGDSVIKQQQLTDGLVVPHEILEICGVRELQKYLNEVQEVYRLQGVINDKHIEIIVRQMLQKVRITDPGDTTLL
FGEDVNKKEFEYENRRTEEDGGKPAQAVPVLGITKASLGTESFISAASFQDTRVLTDAACCSKTDYLLGFKENVIMGH
MIPGGTGFFETHKRIKQYLEKEQEDLVDFVSETECV

Seq ID 80

MDTQSSIGNEEWRIAGTSVVSGMALGKVFFLGTSPHLVRELTLPQEEVEHEIHRYKALNRSKSDIVALEQEVTGQQGLQ
EVSSILQAHLEIMKDPDLLTEEVVNTIRKDRKNAEYVFSSVMGKIEESLTAVRGMPVVDVQDIHDSNRVIGHLCCQHK
SSLGESDQNLIIIFSEELTPSEVASANSAYIRGFVSLVGAATSHTAIVSRAKSIPLYANI SEELWNIARKYNGKLVLDIGY
RGEILFNPKPATLQSCYKKELSVVAHTSQRVLRKSLHPIVSSHAGSDKDVEDLLENFPQTSIGLFRSEFLAVILGRPLTL
REQVDLYEKLARFPDGSPSVLRFLDFGEDKPCPGIKNKKERSIRWLLDYSVILEDQLQAIKASLQSGIKVLIPGVSDVS
BIIIEVKKKWETIQTRFPKGHKVSWGTMIEFPSAVWMIIEILPECDFLSIGTNDLVQYTLGISRESALPKHLNVTLPPIAVI
RMTHHVLQAAKQNVVPSICGEAAGQLSLTFLFIGLVQELSVAMPVINRLRNHIALLELNSCLEITALLQAKTCEVE
ELLNRNNKITS

Seq ID 81

MRQEKDSLGIIVEVPEDKLYGAQTMRSRNFSSWGPPELMPYEVIRALVWIKKCAAQANQDLGFLDSKXCDMIVAAADEILEG
GFEEHFPLKVWQTGSGTQSNMNVNEVIANLAIRHHGGVLSKDPHHPNDHVNKSQSSNDVFPMTAMHIAAVISLKNKLIPA
LDHMIRVLDKAVEEFRHDVKIGRTHLMDAVEMTLGQEFSSYSSQLRHCLESIAFSLAHLYLELAIGATAVGTGLNVPEGFV
EKIHYLRKETDEPFI PASNYFSALSCHDALVDAHGSLATLACALTKIATDLSFLGSGPRCGLGELEFPENEPGSSIMPG
KVNPTQCEALQMVCAQVLGNQTVIIGSGRGNFELNVMKPVIIYNFLQSVDDLSEGMRAFSEFFVKGLKVNKARLQDNIN
NSLMLVLTALAPVLGYDKCSKAALKAFHESISLKEACALALGYLSEKEFDRLVVPENVMVGNH

Seq ID 82

MGLYDRDYIQDSRVQGTFFASRVYGMWTAGLIVTSCVALGLYFSGLYRSLFSFWWWCFATLGVSFFINSKIQTLSVSAVG
GLFLLYSTLEGMFFGTLLPVYAAQYGGGVIAAFGSAALVFLGAAYGAFTKSDLTISKIMTFALIGLLLVTLVFAVVS
MFVSMPLIYLLICYLGLVIFVGLTAADAQAIRRISSTIGDNNTLSYKLSLMPALKMYCNVIMVFWYLLQIFSSSGNRD

Seq ID 83

MVAKKTVRSYRSSFSHSHVIVAILSAGIAFEAHSLSSELDLGVFNKQFEHSAHVEEAQTSVLKGS DVPNPSQKESKVL
YTQVPLTQSSGESLDLADANFLEHFQHLFEETTTFVGFIDQKLWSDLDTRNFSQPTQEPDTSNAVSEKISSDTKENRKDL
ETEDPSKKGLKEVSSDLPKSPETAVAAISEDLEISENISARDPLQGLAFFYKNTSSQSISEKDSSFGQIIFSGSGANS
LGFENLKAPKSGAAVYSDRDIVFENLVKGLSFISCESLEDGSAAGVNVVTHCGDVTLTDCATGLDLEALRLVKDFSRGG
AVFTARNHEVQNNLAGGILSVVGNKGAIVVEKNSAEKSGGACFACGSFVYSNNENTALWKENQALSGGAISSASDIDIQ
NCSAIEFSGNQSLIALGEHIGLTFVGGGALAAQGTLLTRNNNAVVCVKNTSKTHGGAILAGTVDLNETISEVAFKQNTA
ALTGGALSANDKVIIANNFGEILFEQNEVRNHGGAIYCCCRSNPKLEQKDSGENINIIGNSGAIITFLKNKASVLEVMTOA
EDYAGGGALWGHNVLLDSNSGNIQFIGNIGGSTFWIGEYVGGGAILSTDRVTISNNSGDVVFKNKGQCLAQKYVAPQET
APVESDASSTNKDEKSLNACSHGDHYPPKTVEEVPPSLLEEHPVVSSTDIRGGGAILAQHIFITDNTGNLRFSGNLGGG
EESSTVGDLAIVGGGALLSTNEVNVCSNQNVVSDNVTNSNGCDGGAILAKKVDISANHSVEFVSNGSGKFGGAVCALNE
SVNITDNGSAVSFSKNRTRLGGAGVAAPQGSVTICGNQGNIAFKENFVFGSENQRSGGAIANSVNIQDNAGDILFVS
NSTGSYGGAI FVGSVLVASEGNSPRTLITGNSGDLFAKNSTQTAASLSEKDSFGGGAITYQNLKIVKNAGNVSYFGNRA
PSGAGVQIADGGTVCLEAFGGDILFEGNINFDGSFNAIHL CGNDSKIVELSAVQDKNII FQDAITYEENTIRGLPKDVS
PLSAPSLIFNSKPQDDSAQHHEGTIRFSRGVSKIPQIAAIQEGTLALSQNAELWLAGLKQETGSSIVLSAGTIRGLRIFDSQ
VDSSAPLPTENKEETLVSAQVQINMSSPTPNKDKAVDTPVLADIISITVDLSSFVPEQDGTLPPEIIPKGTKLHNSA

IDLKIIDPTNVGYENHALLSSHKDIPLISLKTAEGMTGTPTADASLSNIKIDVSLPSITPATYGHTGVWSESKMEDGRLV
VGWQPTGYKLNPEKQAGALVNLNLSHYTDLRALKQEIFAHHTIAQRMELDFSTNVWGSGLGVVEDCQNI GEFDFGKHHLT
GYALGLDTQLVEDFLIGGCFBQFFGKTESQSYKAKNDVKSVMGAAYAGILAGPWLKGAFFVYGNINNDLTDDYGTGIST
GSWIGKGFIAGTSIDYRYIVNPRRFLISAIVSTVVPFVBAEYVRIDLPEISEQGKEVRTFQKTRFENVAIPFGFALEHAYS
RGSRAEVNSVQLAYVFDVYRKGPSVSLTLKDAAYSWSYGVDPICKAWKARLSNNTWNSYLSYLAFFNYEWREDLIAYD
FNGGIRIIF

Seq ID 84

MLIKLWRATYEGMYTFLVGALLKLRYRMQVEGWDTLNINPKQGCLFLANHVAEVDPIILEYLFWSRFHVRPMAVEYLFHS
RVVQWFLNSVRSIPIQLVPGKESKRSLERMNVCEEASRALNRGESLLLYPSGRLSRTGKEEIVNQYSAYVLLHRVMC
NVVLVRVSGLWGSAPFSRYKQNSTPKLGPAPKEAFRALLRRGIFMPKRFVKITLCQVDHLFLKQFPPTKQDLNTFLASWFN
QGDDNLPFIEVPA

Seq ID 85

MINKELDIGILGKIAGAIKQISIESIQKASSGHPLPLGCAELAAALYGYVLRQNPDPHWINRDRFVLSAGHGSXLLYS
CLHLAGFVDSLEDLQEFRLHSRTPGHPEYGETVGVEATTGPLGQGLGNAVGMALSMKMLESRFNRPGHEIFNGKIYCLA
GDGCFMEGVSHVCSFAGSLNLLNLLVVIYDYNVLDGYLNEISVEDTKKRFAYGWDVYEIDGYDFTTHIHETFSIKRG
QERPVLIAHTTIIGHGSPKEGTNKAHGSPLGVEGTHTKQFWHLPEKFFVPPAVKNFFFAHKIQEDRKAQEQWLDEVVW
SKQFPPELHEEFVALTSHKLPKNLESLSVQSVEMPDSIAGRAASNKLIQVLVQHYPYLIGGSADLSSSDGTWIANEKVIHTY
DFSGRNKIKYGVREFGMATIMNGLAYSQVFRPFGGTFVFSYMRNAIRLAALSKLPVIYQFTHDSIFVGEDGPTHQFVEQ
LMSLRAPGLYVIRPADANEVRGAWIAGLKHTGPTVIVLSRQALPTLPAAHRPFDGVGGRGAYIVLKESGEKPDYTLFAT
GSEVSLALSVAKELEHLDKQVRVVSFPCEWELFEAQDQVDYKQSI VGGDLGIRVSI EAGSALGWYKYIGSEGLAIAMDRFGY
SGASDDVSEECGFTTEQILQRILSQ

Seq ID 86

MSTMQNCPHFGVCGGCSFPQSNYSDSLKKKEELLHQLFAPLVPSPDMIAPIIPCSPLRGRNKMESFFQTYEGEKSLGFI
SSTKPKKGIPVTTCLLIHEQTMIDILKLTREWWDKHPELMAYFPPKNKGSCLTLTVRTGSPQONFMVILTTSPTPEYRVNE
ACIDEWKEILLSSSLNIASTYWEKVAARGISTYETKLLYGAPSIQKLSLPSDGNSASFSLRPSFFQPOITQAAKII
ETAKEFINPEGSETLLDLYCGAGTIGIMLSPYVKNVIGVEIIPDAVASAQENIKANNKEDCCEVYLEDKAFCKRNNCK
APDVIIIDPPRCGMQSKVLKYILRIGSPKIVYISCNPKTQFQECADLISGGYRIKKMQPIDQFPYSTHLENIILLEREID
L

Seq ID 87

MTSGVSGSSSQDPTLAAQLAQSSQKAGNAQSGHDTKNVTKQGAQAEVAAGGFEDLIQDASAQSTGKKEATSSTTKSSKGE
KSEKSGKSSSTSVASASETATAQAVQGPGLRQNNYDSPSLPTPEAQTINGIVLKKGMGTALLGLVMTLMANAAGESW
KASFQSONQAIRSQVESAPAIKEIKRQANHQASATEAQAKQSLISGIVNIVGFTVSVGAGIFSAAKGATSALKSASFAN
ETGASAAGGAASKALTSASSSVQOTMASTAKAATTAASSAGSAATKAAANLTDMAAAASKMASDGASKASGGLFGEVLN
KPNWSEKVSRRMNVTQGARVASFAGNALSSSMQMSQLMHGLTAAVEGLSAGQTGIEVAHHQRLAGQAEQAQAEVLKQMS
SVYQQAGQAGQLQEQAMQSFNTALQTLQNIADSQTQTTSAIFN

Seq ID 88

MSIVRNSALPLCLSRSETFFKKVRSHMKFMKVLTPIWYRKDLWVTAFLLLTAIPGSFAHTLVDIAGEPRHAAQATGVSGDG
KIVIGMKVPDDPFAITVGFQYIDGHLQPLEAVRPQCSVPNGITPDGTVIVGTNYAIGMGSVAVKWVNGKVSELPMPLPT
LDSVASAVSADGRVIGGNRNINLGASVAVKWEDDVTQLPSLPDAMNACVNGISSDGSIIIVGTMVDVSWRNTAVQWIGDQ
LSVIGTLGGTTSVASAISTDGTIVVGGSENADSTHAYAYKNGVMSDIGTLGGFYSLAHAVSSDGSVIVGVSTNSEHRYH
AFQYADQGMVDLGLTGGPESYAQGVSGDGKIVIGRAQVPSGDWHAFLCPFPQAPSPAPVHGGSTVVTSONPRGMVDINATY
SSLKNSQQQLQRLLIQHSKVESVSSGAPSTSVKGAISKQSPAVQNDVQKGTFLSYRSQVHGNVQNLQLLTGAFMDWKL
ASAPKCGFKVALHYGSQDALVERAALPYTEQGLGSSVLSGGGQVQGRYDFNLGETVVLQPFMGIIQVLHLSREGYSEKNV
RFPVSYDSVAYSAAATSFMGAVFASLSPKMSTAATLGVVERDLNLSHIDEFGKSVSAMGNFVLENSTVSVLRPFASLAMYD
VRQQQLVTLVSVVMNQQLTGTLSLVSQSSYNLSF

Seq ID 89

MFRCILFGIFLLTCFSSGGVLYLFCSHDFSIGPKEKRSVWIEEEKEFTDSVLHHLPSQHQLHLILCFQGFLLQKQKQF
SQAEIFSKVYDEAQDGPFLFKEEILGSRILNSFFLEKTDVMEITLCLLNQRCNPSPYHLFKALVCYKQKLYREVIEQL
AYWQEEKTRALAPLLNISIEQLLTDFLDYISAHSLIEQKMFPEGRVILNRNINRLKHECEWNAKTYDRIAILLSRSYF
LELVESKSADITYFDYEMVLFYLLKIYILEQCPYAEELLPEEELVSLIMEHVFIPLPKDLYPLIQLLEMWQKHVHPNSSL
VVQILVDRFSTHMEGAIRFCEALVSFSGLEELHQIITTFEELLSNKVQOIKTEEAKQCVALHILDPSSISISEKALSS
DTLQNI VSGDDEQHTKLRYNLDLWEAIIQSYDIDRQQLVHHLVYGAIDLWKKGGNDEKALNLLQLVLRFTSYDIECESVVF
LFIKQAYKQALSSHAIRLLKLEKFI SEANIPSIVISEAEKANFLADA EYLF AHEDYDKCYLSMWLTKVAPSPQSYRLA
GLCLMENKRYDEALEFLCMLSPNNSINDYKTQKALAFCKHQS KDRAS

Seq ID 90

MLGKEEEFTCKQKQCLSHFVTNLTSDVFALKNLPEVVKGALFSKYSRSLGLRALLLKEFLSNEEDGDVCDEAYDFETDV
QKAADFYQRVLDNFGDDSVGELGGAHAMENVSILA KVL EDARIGGSPLEKSTRYVYFDQKVRGEYLYYRDPILMTSAF

KDMFLGTCDFLFDITYSALIPQVRAVFELYPKDSKTPASAYATSLRAKVLDICRGLLPAATLTNLGFFGNGRFWQNLHK
LQGHNLAEELRLGDESLTELMKVIPSFVSRAEPHHHHQAMMQRALKEQLKGLAEQATFSEEMSSSPSVQLVYGDPDG
IYKVAAGFLFPYSNRSLDLIDYCKMPHEDLVQILESSVSARENRRHKS PRGLECVEFGFDILADFGAYRDLQRHRTL
QERQLLSTHHGYNFPVELLDTPMEKSYREAMERANETYNEIVQEFPEEAQYMPMAYNIRWFFHVNARALQWICELRSQP
QGHQNYRTIATGLVREVVKFNPMYELFFKFVDYSDIDLGRNLNQMREKPTT

Seq ID 91

RVMKAVVSHKSRTSSSIHQYSSYSLFYSILK

Seq ID 92

DGVNFGNLFQPCPYCRGKYPSTCTSTLSPSSS

Seq ID 93

GLRRFCKRYSIVVSESGEPFCLLKKKKIFL

Seq ID 94

NFPICDRSSRFRGDCRDEDLGGRNRYEAFDDKTEGHLCSCDTLALSKYCCLSHSHGIWWIDSHASSPCCFCRIGGCFCNT
PYGFLRIFLRLPTESKIEYQ

Seq ID 95

FLPVLPGLLGPPLPQMSFRL

Seq ID 96

FFIKYSLSNGYGIQKYLQTRLSAIPEWHFSGTNTSSKIKKLCEELSONCSYHRSTGILGLRSS

Seq ID 97

CSYSVYSLWSSLQLLMLMKSEKKKSKFFNVSHHFQKVLRLSEDNMVQERFKESRSLAIVKKRMLTKIPE

Seq ID 98

AQAFGSLLLRL

Seq ID 99

ELLISYQRTSSAIGKKNFTTSSQC

Seq ID 100

EGREDLPSALRKGSPTSGNSNFRSAAAYCGSCC

Seq ID 101

RLRSTNTSQSSPQWDCTHPIYLCDVPHGSGYV

Seq ID 102

APQARGDTKIRGYRNRTRAC

Seq ID 103

GRLLKQCMSSLRKWLAILQLFLIAQEKRLTRLQLILLPSTLVKSKQALYHVLVSVLQNTIDSWKLKSLDPKQFSQILM
YFLTRILNRNGIFSISILSPNQEYIADLWALSF

Seq ID 104

STNPTVALASIFDAKTTKCP

Seq ID 105

TDILVKFIKNIFPPLWRGNVVRSKNMTSIYTHANGNLIFQILNEVTQFFKVTPN

Seq ID 106

SSRCTQREIAGRRTVNTPKPKRCMGS

Seq ID 107

IDATQINLNASQVDIHIRNHSSSYWSARTCMRRRVSPSTWSFIYKGEVWSWGRFPVNAFQAPNIIPNRICFYFCSTTPCR
GCISTTRFFSIPRTVDYSSFKFHAHQMIVISCGSRALFHCRFYASRP

Seq ID 108

ALLSRACVASIIPARKSASIAICLPGIASNRNRRAATSATRSAPLVTTIN

Seq ID 109

NKVITGSRVVGACESMETRKPPKCLKKKVDREKAVNIETIKVTAEGKS

Seq ID 110

GISVMMMLSRCLSSFSSTCRRARTLIFPRFVVYVERIPSEPQIIPPVGKSGPGMTCKISSTEACGFASRRSVASISSPKL
CGGIFVAIPTAIPEEPLQRRFGNLEGKTTGSCFVSS

Seq ID 111

SGRIISVMLSAPPCELHSDLIDPDLFEFNHRLNICISAEVRGRVTTHTFRGDSCNMSFNCSVRGNVITIPRIIRIEIRSL
TSSFSIITKCKRISSRLRITNIIAYWSLRYVCLRIDIKTVRECSSIKLRTFRRHITLHNKFTWRSRGI

Seq ID 112

SDRNSFSISVSFSKYADFIAPLNWSLRTTRAFNPVEAALIRFSHSSRVRPEVTVPEIRNS

Seq ID 113

MPWIFYKLEININIGVIKTGFGFCTCGRKRSIEFVLFFNNTNSSSPTSSNGFNNNRETYFFSYF

Seq ID 114

ISMSSIETPSSPTTSIRLPISEPFPSRNCAAFFTAPPQPETFSSKICPTWFKYFDQEIKGSIIEGYLRASARAFAERPNAPT
TANVD

Seq ID 115

GDLEHYKHIHGPFPSKSSHGKRHRHNYLMFLQCRYKTLCGDQES

Seq ID 116

RVSEFNASPPITTSRRDSKQEFCEFFAVFRI

Seq ID 117

SINPLAPQORSLGPAIQYQLEEWPIQDTSISRDPKRLSSTNTSVSYRNASEIFSCNSSLSRTKNIPILDPKCAVFTIIGKE
NVSIRF

Seq ID 118

PLGPAPITTQSNVIFSLTVIKISKRTPLHKCMHLIKKRTLCLF

Seq ID 119

GEQPFLFHPTSQQSLSLYHHYIGTLQSSFHHWKHPLQKIAFPQKIFQDQOVHRLPTSQRGKTDLDPRFL

Seq ID 120

VTSKYASMRPSIPNPASHTRKIRAPTSRLTRFPYAGYISSKKYQGAPVSPQGRSEPSGNTMRFEESPGTHTRPPSPRTD
SEINRSLSLPGIAVG